UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 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, 2022

OR

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

For the transition period from _____ to _____

Commission File Number: 001-37685

PAVMED INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware **(State or Other Jurisdiction of Incorporation or Organization)**	**47-1214177** **(IRS Employer Identification No.)**
One Grand Central Place **60 E. 42nd Street** **Suite 4600** **New York, NY 10165** **(Address of Principal Executive Offices)**	**10165** **(Zip Code)**

(212) 949-4319
(Registrant's Telephone Number, Including Area Code)

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

Title of each Class	Trading Symbol(s)	Name of each Exchange on which Registered
Common Stock, $0.001 par value per share	PAVM	The NASDAQ Stock Market LLC
Series Z Warrants, each to purchase one share of Common Stock	PAVMZ	The NASDAQ Stock Market LLC

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

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

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

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

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

As of November 10, 2022, there were 93,704,719 shares of the registrant's Common Stock, par value $0.001 per share, issued and outstanding (with such number of shares inclusive of shares of common stock underlying unvested restricted stock awards granted under the PAVmed Inc. 2014 Long-Term Incentive Equity Plan as of such date).

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PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands except number of shares and per share data - unaudited)

	September 30, 2022	December 31, 2021
Assets:		
Current assets:		
Cash	$ 56,785	$ 77,258
Accounts receivable	31	200
Prepaid expenses, deposits, and other current assets	5,163	5,179
Total current assets	61,979	82,637
Fixed assets, net	2,374	1,585
Operating lease right-of-use assets	3,079	—
Intangible assets, net	3,950	2,029
Other assets	1,083	725
Total assets	$ 72,465	$ 86,976
Liabilities, Preferred Stock and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,454	$ 3,299
Accrued expenses and other current liabilities	2,930	4,259
Operating lease liabilities, current portion	1,027	—
Senior Secured Convertible Notes - at fair value	35,500	—
Total current liabilities	41,911	7,558
Operating lease liabilities, less current portion	1,998	—
Total liabilities	43,909	7,558
Commitments and contingencies (Note 9)		
Stockholders' Equity:		
Preferred stock, $0.001 par value. Authorized, 20,000,000 shares; Series B Convertible Preferred Stock, par value $0.001, issued and outstanding 1,182,101 at September 30, 2022 and 1,113,919 shares at December 31, 2021	2,624	2,419
Common stock, $0.001 par value. Authorized, 250,000,000 shares; 92,228,862 and 86,367,845 shares outstanding as of September 30, 2022 and December 31, 2021, respectively	92	86
Additional paid-in capital	214,278	198,071
Accumulated deficit	(207,638)	(138,910)
Treasury stock	(408)	—
Total PAVmed Inc. Stockholders' Equity	8,948	61,666
Noncontrolling interests	19,608	17,752
Total Stockholders' Equity	28,556	79,418
Total Liabilities and Stockholders' Equity	$ 72,465	$ 86,976

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands except number of shares and per share data - unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue	$ 76	$ 200	$ 265	$ 200
Operating expenses:				
Cost of revenue	1,626	144	1,996	144
Sales and marketing	4,736	2,293	13,559	5,555
General and administrative	10,320	6,109	30,982	16,314
Amortization of acquired intangible assets	505	17	1,278	23
Research and development	6,202	5,305	18,873	12,878
Total operating expenses	23,389	13,868	66,688	34,914
Net loss from operations	(23,313)	(13,668)	(66,423)	(34,714)
Other income (expense):				
Interest expense	(525)	—	(1,049)	—
Change in fair value - Senior Secured Convertible Notes and Senior Convertible Note	261	—	(1,739)	1,682
Loss on issue and offering costs - Senior Secured Convertible Note	(1,232)	—	(4,332)	—
Debt extinguishments loss - Senior Secured Convertible Notes	(5,123)	—	(5,123)	(3,715)
Debt forgiveness	—	—	—	300
Other income (expense), net	(6,619)	—	(12,243)	(1,733)
Loss before provision for income tax	(29,932)	(13,668)	(78,666)	(36,447)
Provision for income taxes	—	—	—	—
Net loss before noncontrolling interests	(29,932)	(13,668)	(78,666)	(36,447)
Net loss attributable to the noncontrolling interests	3,806	1,441	10,143	3,318
Net loss attributable to PAVmed Inc.	(26,126)	(12,227)	(68,523)	(33,129)
Less: Series B Convertible Preferred Stock dividends earned	(71)	(67)	(209)	(216)
Net loss attributable to PAVmed Inc. common stockholders	$ (26,197)	$ (12,294)	$ (68,732)	$ (33,345)
Per share information:				
Net loss per share attributable to PAVmed Inc. - basic and diluted	$ (0.29)	$ (0.15)	$ (0.78)	$ (0.41)
Net loss per share attributable to PAVmed Inc. common stockholders – basic and diluted	$ (0.29)	$ (0.15)	$ (0.78)	$ (0.42)
Weighted average common shares outstanding, basic and diluted	89,758,927	83,307,170	87,724,124	79,873,583

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (DEFICIT)
for the THREE MONTHS ENDED September 30, 2022
(in thousands except number of shares and per share data - unaudited)

	PAVmed Inc. Stockholders' Equity (Deficit)								
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated	Treasury	Non controlling	
	Shares	Amount	Shares	Amount	Capital	Deficit	Stock	Interest	Total
Balance - June 30, 2022	1,158,950	$ 2,554	87,023,211	$ 87	$ 201,327	$ (181,442)	$ (548)	$ 19,426	$ 41,404
Dividends declared - Series B Convertible Preferred Stock	23,196	70	—	—	—	(70)	—	—	—
Conversions - Series B Convertible Preferred Stock	(45)	—	45	—	—	—	—	—	—
Conversions - Senior Secured Convertible Note	—	—	5,013,908	5	10,107	—	—	—	10,112
Exercise - stock options of majority-owned subsidiary	—	—	—	—	—	—	—	6	6
Purchase - Employee Stock Purchase Plan	—	—	—	—	—	—	140	—	140
Purchase - majority-owned subsidiary common stock - Employee Stock Purchase Plan	—	—	—	—	—	—	—	109	109
Issuance - majority-owned subsidiary common stock - Committed Equity Facility, net of deferred financing charges	—	—	—	—	—	—	—	1,767	1,767
Impact of subsidiary equity transactions	—	—	—	—	1,363	—	—	(1,363)	—
Issuance - majority-owned subsidiary common stock - Settlement APA-RDx - Installment Payment	—	—	—	—	—	—	—	186	186
Stock-based compensation - PAVmed Inc.	—	—	—	—	1,481	—	—	—	1,481
Stock-based compensation - majority-owned subsidiary	—	—	—	—	—	—	—	3,283	3,283
Treasury stock	—	—	191,698	—	—	—	—	—	—
Net loss	—	—	—	—	—	(26,126)	—	(3,806)	(29,932)
Balance - September 30, 2022	1,182,101	$ 2,624	92,228,862	$ 92	$ 214,278	$ (207,638)	$ (408)	$ 19,608	$ 28,556

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (DEFICIT)
for the NINE MONTHS ENDED September 30, 2022
(in thousands except number of shares and per share data - unaudited)

	PAVmed Inc. Stockholders' Equity (Deficit)								
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated	Treasury	Non controlling	
	Shares	Amount	Shares	Amount	Capital	Deficit	Stock	Interest	Total
Balance - December 31, 2021	1,113,919	$ 2,419	86,367,845	$ 86	$ 198,071	$ (138,910)	$ —	$ 17,752	$ 79,418
Dividends declared - Series B Convertible Preferred Stock	68,227	205	—	—	—	(205)	—	—	—
Conversions - Series B Convertible Preferred Stock	(45)	—	45	—	—	—	—	—	—
Vest - restricted stock awards	—	—	541,666	1	(1)	—	—	—	—
Exercise - Series Z warrants	—	—	5	—	—	—	—	—	—
Conversions - Senior Secured Convertible Note	—	—	5,013,908	5	10,107	—	—	—	10,112
Exercise - stock options	—	—	299,999	—	302	—	—	—	302
Exercise - stock options of majority-owned subsidiary	—	—	—	—	—	—	—	694	694
Purchase - Employee Stock Purchase Plan	—	—	194,240	—	218	—	140	—	358
Purchase - majority-owned subsidiary common stock - Employee Stock Purchase Plan	—	—	—	—	—	—	—	109	109
Issuance - majority-owned subsidiary common stock - Committed Equity Facility, net of deferred financing charges	—	—	—	—	—	—	—	1,767	1,767
Impact of subsidiary equity transactions	—	—	—	—	1,375	—	—	(1,375)	—
Issuance - majority-owned subsidiary common stock - Settlement APA-RDx - Installment Payment	—	—	—	—	—	—	—	427	427
Stock-based compensation - PAVmed Inc.	—	—	—	—	4,206	—	—	—	4,206
Stock-based compensation - majority-owned subsidiary	—	—	—	—	—	—	—	10,377	10,377
Treasury stock	—	—	(188,846)	—	—	—	(548)	—	(548)
Net loss	—	—	—	—	—	(68,523)	—	(10,143)	(78,666)
Balance - September 30, 2022	1,182,101	$ 2,624	92,228,862	$ 92	$ 214,278	$ (207,638)	$ (408)	$ 19,608	$ 28,556

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (DEFICIT)
for the THREE MONTHS ENDED September 30, 2021
(in thousands, except number of shares and per share data - unaudited)

	PAVmed Inc. Stockholders' Equity (Deficit)							
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated	Non controlling	
	Shares	Amount	Shares	Amount	Capital	Deficit	Interest	Total
Balance - June 30, 2021	1,185,685	$ 2,499	82,576,816	$ 83	$ 149,694	$ (109,325)	$ (911)	$ 42,040
Dividends declared - Series B Convertible Preferred Stock	24,577	73	—	—	—	(73)	—	—
Conversions - Series B Convertible Preferred Stock	(118,814)	(220)	118,814	—	220	—	—	—
Exercise - Series Z warrants	—	—	1,186,467	1	1,897	—	—	1,898
Exercise - Series W warrants	—	—	3,945	—	20	—	—	20
Exercise - stock options	—	—	483,668	—	823	—	—	823
Purchase - Employee Stock Purchase Plan	—	—	31,112	—	131	—	—	131
Stock-based compensation - PAVmed Inc.	—	—	—	—	1,218	—	—	1,218
Stock-based compensation - majority-owned subsidiary	—	—	—	—	56	—	2,716	2,772
Net loss	—	—	—	—	—	(12,227)	(1,441)	(13,668)
Balance - September 30, 2021	1,091,448	$ 2,352	84,400,822	$ 84	$ 154,059	$ (121,625)	$ 364	$ 35,234

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (DEFICIT)
for the NINE MONTHS ENDED September 30, 2021
(in thousands, except number of shares and per share data - unaudited)

	PAVmed Inc. Stockholders' Equity (Deficit)							
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated	Non controlling	
	Shares	Amount	Shares	Amount	Capital	Deficit	Interest	Total
Balance - December 31, 2020	1,228,075	$ 2,537	63,819,935	$ 64	$ 87,570	$ (88,275)	$ (2,369)	$ (473)
Dividends declared - Series B Convertible Preferred Stock	73,821	221	—	—	—	(221)	—	—
Conversions - Series B Convertible Preferred Stock	(210,448)	(406)	210,448	—	406	—	—	—
Issue common stock – registered offerings, net	—	—	15,782,609	16	53,688	—	—	53,704
Vest - restricted stock awards	—	—	150,000	—	—	—	—	—
Exercise - Series Z warrants	—	—	2,927,125	3	4,680	—	—	4,683
Exercise - Series W warrants	—	—	3,945	—	20	—	—	20
Conversions - Senior Secured Convertible Note	—	—	667,668	1	1,722	—	—	1,723
Exercise - stock options	—	—	604,500	—	953	—	—	953
Purchase - Employee Stock Purchase Plan	—	—	234,592	—	436	—	—	436
Stock-based compensation - PAVmed Inc.	—	—	—	—	4,473	—	—	4,473
Stock-based compensation - majority-owned subsidiary	—	—	—	—	111	—	6,045	6,156
Investment in Veris Health Inc. subsidiary	—	—	—	—	—	—	6	6
Net Loss	—	—	—	—	—	(33,129)	(3,318)	(36,447)
Balance - September 30, 2021	1,091,448	$ 2,352	84,400,822	$ 84	$ 154,059	$ (121,625)	$ 364	$ 35,234

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands, except number of shares and per share data - unaudited)

	Nine Months Ended September 30,	
	2022	2021
Cash flows from operating activities		
Net loss - before noncontrolling interest ("NCI")	$ (78,666)	$ (36,447)
Adjustments to reconcile net loss - before NCI to net cash used in operating activities		
Depreciation and amortization expense	1,731	60
Stock-based compensation	14,583	10,629
In-process R&D charge	—	133
APA-RDx: Issue common stock of majority-owned subsidiary - settle installment payment	427	—
Change in fair value - Senior Secured Convertible Note	1,739	(1,682)
Loss upon Issuance - Senior Secured Convertible Note	3,523	—
Debt extinguishment loss - Senior Secured Convertible Notes and Senior Convertible Note	5,123	3,715
Debt forgiveness	—	(300)
Non-cash lease expense	82	—
Changes in operating assets and liabilities:		
Accounts receivable	169	(200)
Prepaid expenses and other current and non-current assets	(563)	(1,918)
Accounts payable	(981)	2,911
Accrued expenses and other current liabilities	(1,329)	(715)
Net cash flows used in operating activities	(54,162)	(23,814)
Cash flows from investing activities		
Purchase of equipment	(1,242)	(192)
Payments – Acquisitions, net of cash	(3,200)	(147)
Net cash flows used in investing activities	(4,442)	(339)
Cash flows from financing activities		
Proceeds – issue of common stock – registered offerings	—	55,016
Payment – offering costs – registered offerings	—	(1,312)
Proceeds – issue of Senior Secured Convertible Note, net of offering costs	35,227	—
Payment – repayment of Senior Convertible Note and Senior Secured Convertible Note	—	(14,816)
Payment – Senior Convertible Note and Senior Secured Convertible Note – non-installment payments	—	(154)
Proceeds – majority-owned subsidiary common stock - Committed Equity Facility	1,807	—
Proceeds – exercise of Series Z warrants	—	4,115
Proceeds – exercise of stock options	302	953
Proceeds – issue common stock – Employee Stock Purchase Plan	358	436
Proceeds – majority-owned subsidiary common stock – Employee Stock Purchase Plan	109	—
Proceeds – exercise of stock options issued under equity plan of majority owned subsidiary	694	—
Purchase Treasury Stock – payment of employee payroll tax obligation in connection with stock-based compensation	(366)	—
Net cash flows provided by financing activities	38,131	44,238
Net increase (decrease) in cash	(20,473)	20,085
Cash, beginning of period	77,258	17,256
Cash, end of period	$ 56,785	$ 37,341

See accompanying notes to the unaudited condensed consolidated financial statements.

Note 1 — The Company

Description of the Business

PAVmed Inc and Subsidiaries, referred to herein as "PAVmed" or the "Company," is comprised of PAVmed Inc. and its wholly-owned subsidiary and its majority-owned subsidiaries, inclusive of Lucid Diagnostics Inc. ("Lucid Diagnostics" or "LUCID") and Veris Health Inc. ("Veris Health" or "VERIS").

The Company is organized to advance a broad pipeline of innovative medical technologies from concept to commercialization, employing a business model focused on capital efficiency and speed to market. The Company's activities have focused on advancing the lead products towards regulatory approval and commercialization, protecting its intellectual property, and building its corporate infrastructure and management team.

The Company's current operational activities are principally focused on the commercialization of EsoGuard, CarpX and Veris Solar, while its development activities are focused on pursuing FDA approval and clearance of other lead products in our product portfolio pipeline, including EsoGuard IVD, PortIO, EsoCure and digital health technologies acquired by the Company's majority-owned subsidiary Veris Health Inc.

The ability of the Company to generate revenue depends upon the Company's ability to successfully advance the commercialization of EsoGuard, CarpX, and Veris Solar while also completing the development and the necessary regulatory approvals of its other products and services. There are no assurances, however, the Company will be able to obtain an adequate level of financial resources required for the long-term commercialization and development of its products and services.

The Company has financed its operations principally through public and private issuances of its common stock, preferred stock, common stock purchase warrants, and debt. The Company is subject to all of the risks and uncertainties typically faced by medical device and diagnostic companies that devote substantially all of their efforts to the commercialization of their initial product and services and ongoing research and development activities and conducting clinical trials. The Company expects to continue to experience recurring losses from operations and will continue to fund its operations with debt and equity financing transactions. Notwithstanding, however, with the cash on-hand as of the date hereof and other debt and equity committed sources of financing, the Company expects to be able to fund its operations and meet its financial obligations as they become due for the one year period from the date of the issue of the Company's unaudited condensed consolidated financial statements, as included herein in this Quarterly Report on Form 10-Q for the period ended September 30, 2022.

Note 2 — Summary of Significant Accounting Policies

Significant Accounting Policies

The Company's significant accounting policies are as disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2021 as filed with the SEC on April 6, 2022, except as otherwise noted herein below.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of PAVmed Inc. and Subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), and applicable rules and regulations of the United States Securities and Exchange Commission ("SEC"), and include the accounts of the Company and its wholly-owned and majority-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation. The Company holds a majority-ownership interest and has controlling financial interest in each of: Lucid Diagnostics Inc., Veris Health Inc., and Solys Diagnostics Inc., with the corresponding noncontrolling interest included as a separate component of consolidated stockholders' equity (deficit), including the recognition in the unaudited condensed consolidated statement of operations of a net loss attributable to the noncontrolling interest based on the respective minority-interest equity ownership of each majority-owned subsidiary. See Note 15, *Noncontrolling Interest*, for a discussion of each of the majority-owned subsidiaries noted above. The Company manages its operations as a single operating segment for the purposes of assessing performance and making operating decisions.

As permitted under SEC rules, certain footnotes or other financial information normally required by U.S. GAAP have been condensed or omitted. The balance sheet as of December 31, 2021 has been derived from audited consolidated financial statements at such date. The accompanying unaudited condensed consolidated financial statements have been prepared on the same basis as the Company's annual consolidated financial statements, and in the opinion of management, include all adjustments, consisting only of routine recurring adjustments, necessary for a fair presentation of the Company's unaudited condensed consolidated financial information.

Note 2 — Summary of Significant Accounting Policies - continued

The consolidated results of operations for the three and nine months ended September 30, 2022 are not necessarily indicative of the consolidated results to be expected for the year ending December 31, 2022 or for any other interim period or for any other future periods. The accompanying unaudited condensed consolidated financial statements and related unaudited condensed consolidated financial information should be read in conjunction with the PAVmed Inc and Subsidiaries audited consolidated financial statements and related notes thereto as of and for the year ended December 31, 2021 included in the Company's Annual Report on Form 10-K as filed with the SEC on April 6, 2022.

All amounts in the accompanying unaudited condensed consolidated financial statements and these notes thereto are presented in thousands of dollars, if not otherwise noted as being presented in millions of dollars, except for shares and per share amounts.

Reclassifications

Certain prior-year amounts have been reclassified to conform to the current year presentation, which includes presenting costs of revenue within operating expenses on the statements of operations, in the unaudited condensed consolidated financial statements and accompanying notes to the unaudited condensed consolidated financial statements. The impact of the reclassifications made to prior year amounts is not material and did not affect net loss.

Use of Estimates

In preparing the unaudited condensed consolidated financial statements in conformity with U.S. GAAP, management is required to make estimates and assumptions that affect the reported amounts of assets and the determination of corresponding carrying value reserve, if any, and liabilities and the disclosure of contingent losses, as of the date of the consolidated financial statements, as well as the reported amounts of revenue and expenses during the reporting period. Significant estimates in these unaudited condensed consolidated financial statements include those related to the estimated fair value of debt obligations, stock-based equity awards, intangible assets and common stock purchase warrants. Other significant estimates include the estimated incremental borrowing rate, the provision or benefit for income taxes and the corresponding valuation allowance on deferred tax assets. Additionally, management's assessment of the Company's ability to continue as a going concern involves the estimation of the amount and timing of future cash inflows and outflows. On an ongoing basis, the Company evaluates its estimates and assumptions. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. Due to inherent uncertainty involved in making estimates, actual results reported in future periods may be affected by changes in these estimates.

Leases

The Company adopted FASB ASC Topic 842, *Leases*, ("ASC 842") effective December 31, 2021.

All significant lease agreements and contractual agreements with embedded lease agreements are accounted for under the provisions of ASC 842, wherein, if the contractual arrangement: involves the use of a distinct identified asset; provides for the right to substantially all the economic benefits from the use of the asset throughout the contractual period; and provides for the right to direct the use of the asset. A lease agreement is accounted for as either a finance lease (generally with respect real estate) or an operating lease (generally with respect to equipment). Under both a finance lease and an operating lease, the Company recognizes as of the lease commencement date a lease right-of-use ("ROU") asset and a corresponding lease payment liability.

A lease ROU asset represents the Company's right to use an underlying asset for the lease term, and the lease liability represents its contractual obligation to make lease payments. The lease ROU asset is measured at the lease commencement date as the present value of the future lease payments plus initial direct costs incurred. The Company recognizes lease expense of the amortization of the lease ROU asset for an operating lease on a straight-line basis over the lease term; and for financing leases on a straight-line basis unless another basis is more representative of the pattern of economic benefit. The operating ROU asset also includes any lease incentives received for improvements to leased property, when the improvements are lessee-owned. For improvements to leased property that are lessor-owned, the Company includes amounts the Company incurred for the improvements as ROU assets which are amortized on a straight-line basis over the life of the lease.

The lease liability is measured at the lease commencement date with the discount rate generally based on the Company's incremental borrowing rate (to the extent the lease implicit rate is not known nor determinable), with interest expense recognized using the interest method for financing leases.

Certain leases may include options to extend or terminate the agreement. The Company does not assume renewals in determination of the lease term unless the renewals are deemed to be reasonably certain at lease commencement. As well, an option to terminate is considered unless it is reasonably certain the Company will not exercise the option. The Company elected the practical expedient to not recognize a lease ROU asset and lease payment liability for leases with a term of twelve months or less ("short-term leases"), resulting in the aggregate lease payments being recognized on a straight line basis over the lease term. The Company's leases with a commencement date prior to January 1, 2022 were short-term leases and therefore did not require recording a ROU asset or lease liability at December 31, 2021. Additionally, the Company elected the practical expedient to not separate lease and non-lease components.

Note 2 — Summary of Significant Accounting Policies - continued

Fair Value Option ("FVO") Election

Under a Securities Purchase Agreement dated March 31, 2022, the Company issued a Senior Secured Convertible Note dated April 4, 2022, referred to herein as the "April 2022 Senior Convertible Note", and a Senior Secured Convertible Note dated September 8, 2022, referred to herein as the "September 2022 Senior Convertible Note", which are accounted under the "fair value option election" as discussed below.

Under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 815, *Derivative and Hedging*, ("ASC 815"), a financial instrument containing embedded features and /or options may be required to be bifurcated from the financial instrument host and recognized as separate derivative asset or liability, with the bifurcated derivative asset or liability initially measured at estimated fair value as of the transaction issue date and then subsequently remeasured at estimated fair value as of each reporting period balance sheet date.

Alternatively, FASB ASC Topic 825, *Financial Instruments*, ("ASC 825") provides for the "fair value option" ("FVO") election. In this regard, ASC 825-10-15-4 provides for the FVO election (to the extent not otherwise prohibited by ASC 825-10-15-5) to be afforded to financial instruments, wherein the financial instrument is initially measured at estimated fair value as of the transaction issue date and then subsequently remeasured at estimated fair value as of each reporting period balance sheet date, with changes in the estimated fair value recognized as other income (expense) in the statement of operations. The estimated fair value adjustment of the April 2022 Senior Convertible Note is presented in a single line item within other income (expense) in the accompanying unaudited condensed consolidated statement of operations (as provided for by ASC 825-10-50-30(b)). Further, as required by ASC 825-10-45-5, to the extent a portion of the fair value adjustment is attributed to a change in the instrument-specific credit risk, such portion would be recognized as a component of other comprehensive income ("OCI") (for which there was no such adjustment with respect to the April 2022 Senior Convertible Note or the September 2022 Senior Convertible Note).

See Note 10, *Financial Instruments Fair Value Measurements*, with respect to the FVO election; and Note 11, *Debt*, for a discussion of the April 2022 Senior Convertible Note and the September 2022 Senior Convertible Note.

Revenue Recognition

Revenues are recognized when the satisfaction of the performance obligation occurs, in an amount that reflects the consideration the Company expects to collect in exchange for those services. The Company's revenue is primarily generated by its laboratory testing services utilizing its EsoGuard Esophageal DNA tests. The services are completed upon release of a patient's test result to the ordering healthcare provider. Revenue recognized is inclusive of both variable consideration in connection with an individual patient's third-party insurance coverage policy and fixed consideration in connection with a contracted services arrangement with an unrelated third party legal entity. To determine revenue recognition for the arrangements that the Company determines are within the scope of ASC 606, Revenue from Contracts with Customers, the Company performs the following five steps: (1) identify the contract(s) with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract and (5) recognize revenue when (or as) the entity satisfies a performance obligation.

The key aspects considered by the Company include the following:

Contracts—The Company's customer is primarily the patient, but the Company does not enter into a formal reimbursement contract with a patient. The Company establishes a contract with a patient in accordance with other customary business practices, which is the point in time an order is received from a provider and a patient specimen has been returned to the laboratory for testing. Payment terms are a function of a patient's existing insurance benefits, including the impact of coverage decisions with Center for Medicare & Medicaid Services ("CMS") and applicable reimbursement contracts established between the Company and payers. However, when a patient is considered self-pay, the Company requires payment from the patient prior to the commencement of the Company's performance obligations. The Company's consideration can be deemed variable or fixed depending on the structure of specific payer contracts, and the Company considers collection of such consideration to be probable to the extent that it is unconstrained.

Performance obligations—A performance obligation is a promise in a contract to transfer a distinct good or service (or a bundle of goods or services) to the customer. The Company's contracts have a single performance obligation, which is satisfied upon rendering of services, which culminates in the release of a patient's test result to the ordering healthcare provider. The Company elects the practical expedient related to the disclosure of unsatisfied performance obligations, as the duration of time between providing testing supplies, the receipt of a sample, and the release of a test result to the ordering healthcare provider is far less than one year.

Note 2 — Summary of Significant Accounting Policies - continued

Transaction price—The transaction price is the amount of consideration that the Company expects to collect in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration expected to be collected from a contract with a customer may include fixed amounts, variable amounts, or both.

If the consideration derived from the contracts is deemed to be variable, the Company estimates the amount of consideration to which it will be entitled in exchange for the promised goods or services. The Company limits the amount of variable consideration included in the transaction price to the unconstrained portion of such consideration. In other words, the Company recognizes revenue up to the amount of variable consideration that is not subject to a significant reversal until additional information is obtained or the uncertainty associated with the additional payments or refunds is subsequently resolved.

When the Company does not have significant historical experience or that experience has limited predictive value, the constraint over estimates of variable consideration may result in no revenue being recognized upon delivery of patient EsoGuard test results to the ordering healthcare provider. As such, the Company recognizes revenue up to the amount of variable consideration not subject to a significant reversal until additional information is obtained or the uncertainty associated with additional payments or refunds, if any, is subsequently resolved. Differences between original estimates and subsequent revisions, including final settlements, represent changes in estimated expected variable consideration, with the change in estimate recognized in the period of such revised estimate. With respect to a contracted service arrangement, the fixed consideration revenue is recognized on an as-billed basis upon delivery of the laboratory test report with realization of such fixed consideration deemed probable based upon actual historical experience.

Allocate transaction price—The transaction price is allocated entirely to the performance obligation contained within the contract with a customer on the basis of the relative standalone selling prices of each distinct good or service.

Practical Expedients—The Company does not adjust the transaction price for the effects of a significant financing component, as at contract inception, the Company expects the collection cycle to be one year or less.

Note 3 — Revenue from Contracts with Customers

EsoGuard Commercialization Agreement

The Company, through its majority-owned subsidiary, Lucid Diagnostics Inc., entered into the EsoGuard Commercialization Agreement, dated August 1, 2021, with its former commercial laboratory service provider, ResearchDx Inc. (“RDx”), an unrelated third-party. The EsoGuard Commercialization Agreement was on a month-to-month basis, and was terminated on February 25, 2022 upon the execution of an asset purchase agreement (“APA”) dated February 25, 2022, between LucidDx Labs Inc. (a wholly-owned subsidiary of Lucid Diagnostics Inc.) and RDx, with such agreement further discussed in Note 5, *Asset Purchase Agreement and Management Services Agreement.*

Revenue Recognized

In the three months and nine months ended September 30, 2022, the Company recognized total revenue of $76 and $265, respectively. For the three month period ended September 30, 2022, the Company recognized revenue resulting from the delivery of patient EsoGuard test results .. Revenue recognized from customer contracts deemed to include a variable consideration transaction price is limited to the unconstrained portion of the variable consideration as the Company did not estimate expected variable consideration given the lack of historical experience and objective reliable actual reimbursement data. In addition to the revenue recognized during the three month period ended September 30, 2022, the Company’s revenue for the nine month period ended September 30, 2022 includes $189 of revenue recognized under the EsoGuard Commercialization Agreement, which represented the minimum fixed monthly fee of $100 for the period January 1, 2022 to the February 25, 2022 termination date as discussed above. The monthly fee was deemed to be collectible for such period as RDx has timely paid the applicable respective monthly fee. In the three and nine months ended September 30, 2021, the Company recognized total revenue of $200 and $200, respectively, under the EsoGuard Commercialization Agreement.

Cost of Revenue

The cost of revenues principally includes the costs related to the Company’s laboratory operations (excluding estimated costs associated with research activities), the costs related to the EsoCheck cell collection device, cell sample mailing kits and license royalties.

In the three months ended September 30, 2022, the cost of revenue was $1,626 and was primarily related to costs for our laboratory operations and EsoCheck device supplies. For the nine months ended September 30, 2022, the cost of revenue was $1,996, including $369 reflecting costs attributable to delivering the services under the EsoGuard Commercialization Agreement for the period January 1, 2022 to February 25, 2022. In the three and nine months ended September 30, 2021, the cost of revenue was $144 and $144, respectively, which solely related to the EsoGuard Commercialization Agreement.

Note 4 — Related Party Transactions

Case Western Reserve University and Physician Inventors - Amended CWRU License Agreement

Case Western Reserve University ("CWRU") and each of the three physician inventors ("Physician Inventors") of the intellectual property licensed under the amended and restated patent license agreement with CWRU, dated August 23, 2021 (the "Amended CWRU License Agreement"), each hold a minority equity ownership interest in Lucid Diagnostics Inc. The expenses incurred with respect to the Amended CWRU License Agreement and the three Physician Inventors, as classified in the accompanying consolidated statement of operations for the periods indicated are summarized as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Cost of Revenue				
CWRU – Royalty Fee	$ 4	$ 10	$ 13	$ 10
General and Administrative Expense				
CWRU – License Agreement - Amendment Fee - Milestone III	—	10	—	10
Stock-based compensation expense – Physician Inventors' restricted stock awards	275	273	819	637
Research and Development Expense				
Amended CWRU License Agreement - reimbursement of patent legal fees	—	82	209	195
Fees - Physician Inventors' consulting agreements	15	8	32	22
Sponsored research agreement	4	—	6	—
Stock-based compensation expense – Physician Inventors' stock options	52	56	151	114
Total Related Party Expenses	$ 350	$ 439	$ 1,230	$ 988

See Note 12, *Stock-Based Compensation*, for information regarding each of the "PAVmed Inc. 2014 Long-Term Incentive Equity Plan" and the separate "Lucid Diagnostics Inc 2018 Long-Term Incentive Equity Plan"; and Note 15, *Noncontrolling Interest*, for a discussion of Lucid Diagnostics Inc. and the corresponding noncontrolling interests.

Other Related Party Transactions

Lucid Diagnostics Inc. previously entered into a consulting agreement with Stanley N. Lapidus, effective June 2020 with such consulting agreement providing for compensation on a contractual rate per hour for consulting services provided. In July 2021, Mr. Lapidus was appointed as Vice Chairman of the Board of Directors of Lucid Diagnostics Inc. Lucid Diagnostics Inc. recognized general and administrative expense of $8 and $21 in the three and nine months ended September 30, 2021 in connection with the consulting agreement.

Effective June 2021, Veris Health Inc. entered into a consulting agreement with Andrew Thoreson, M.D. which provides for compensation on a contractual rate per hour for consulting services provided. Dr. Thoreson holds a partial ownership interest in the legal entity which holds a minority interest in Veris Health Inc. Veris Health Inc. recognized general and administrative expense of $8 and $45 in the three and nine months ended September 30, 2022 in connection with the consulting agreement.

Note 5 — Asset Purchase Agreement and Management Services Agreement

Asset Purchase Agreement - ResearchDx Inc.

LucidDx Labs Inc., a wholly-owned subsidiary of Lucid Diagnostics Inc., entered into an asset purchase agreement ("APA") dated February 25, 2022, with ResearchDx, Inc. ("RDx"), an unrelated third-party - ("APA-RDx"). Under the APA-RDx, LucidDx Labs Inc. acquired certain assets from RDx which were combined with LucidDx Labs Inc. purchased and leased property and equipment to establish a Company-owned Commercial Lab Improvements Act ("CLIA") certified, College of American Pathologists ("CAP") accredited commercial clinical laboratory capable of performing the EsoGuard® Esophageal DNA assay, inclusive of DNA extraction, next generation sequencing ("NGS") and specimen storage. Prior to February 25, 2022, RDx provided such laboratory services at its owned CLIA-certified, CAP-accredited clinical laboratory.

The total purchase price consideration payable under the APA-RDx is a face value of $3,200 comprised of three contractually specified periodic payments. The APA-RDx is being accounted for as an asset acquisition, with the recognition of an intangible asset of approximately $3,200, which is included in "Intangible assets, net" on the accompanying unaudited condensed consolidated balance sheet, as further discussed in Note 8, *Intangible Assets, net.* In the three and nine months ended September 30, 2022, a total of $1,000 and $3,200, respectively, of cash was paid with respect to the periodic payments.

Additionally, the APA-RDx requires the Company to pay a total of $3,000 to be paid as twelve (12) equal installment payments commencing May 25, 2022 and then on each three month anniversary thereof, inclusive of a final installment payment on February 25, 2025, with such installment payments recognized as current period expense as incurred. In the three and nine months ended September 30, 2022, as provided for in the APA-RDx, installment payments were settled with the issuances of 82,618 and 199,989 shares of common stock of Lucid Diagnostics Inc., with such shares having fair values of $188 and $427, respectively, (with the fair value measured as the quoted closing price on the dates the shares were issued), which was recognized as a current period expense included in general and administrative expenses in the accompanying unaudited condensed consolidated statement of operations.

The APA-RDx provides for each of an acceleration and a cancellation of the remaining unpaid installment payments, summarized as follows:

- The payment of the remaining unpaid installment payments will be accelerated as immediately due and payable as of the date the "MSA-RDx" (as such agreement is discussed below) is either terminated by LucidDx Labs Inc. without cause or if it is terminated by mutual agreement between LucidDx Labs Inc. and RDx.

- The payment of the remaining unpaid installment payments will be cancelled if the MSA-RDx is terminated by LucidDx Labs Inc. for cause, defined as the occurrence of any one of: (i) a material breach by RDx which is not cured within thirty days of LucidDx Labs Inc. written notice; (ii) RDx becomes insolvent and /or bankrupt; or (ii) RDx fails to comply with applicable statutes, is barred from participating in federal health care programs, or by action of changes in law or regulation, or by action of judicial interpretation of law, or by judicial civil proceedings decisions.

Management Services Agreement - Research Dx Inc

LucidDx Labs Inc. and RDx entered into a separate management services agreement ("MSA-RDx"), dated and effective February 25, 2022, with such agreement having a term of three years commencing on the agreement's effective date, and an initial fee of $150 per quarter. The MSA-RDx provides for the cancellation of the remaining unpaid installment payments upon termination of the MSA-RDx for any reason or no reason by either party thereto.

Note 6 — Prepaid Expenses, Deposits, and Other Current Assets

Prepaid expenses and other current assets consisted of the following as of:

	September 30, 2022	December 31, 2021
Advanced payments to service providers and suppliers	$ 581	$ 808
Prepaid insurance	453	1,856
Deposits	3,980	1,989
EsoCheck cell collection supplies	55	434
EsoGuard mailer supplies	49	59
CarpX devices	45	33
Total prepaid expenses, deposits and other current assets	$ 5,163	$ 5,179

Note 7 — Leases

During the nine months ended September 30, 2022, the Company entered into additional lease agreements that have commenced and are classified as operating leases and short-term leases, including for each of: a research and development facility; a commercial clinical laboratory; additional Lucid Test Centers; and for office space.

The Company's future lease payments as of September 30, 2022, which are presented as operating lease liabilities, current portion and operating lease liabilities, less current portion on the Company's unaudited condensed consolidated balance sheets are as follows:

2022 (remainder of year)	$ 299
2023	1,229
2024	1,184
2025	288
2026	272
Thereafter	132
Total lease payments	$ 3,404
Less: imputed interest	(379)
Present value of lease liabilities	$ 3,025

Supplemental disclosure of cash flow information related to the Company's cash and non-cash activities with its leases are as follows:

	Nine Months Ended September 30,	
	2022	2021
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 763	$ —
Non-cash investing and financing activities		
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 3,753	$ —
Weighted-average remaining lease term - operating leases (in years)	3.08	—
Weighted-average discount rate - operating leases	7.875%	—%

As of September 30, 2022, the Company's right-of-use assets from operating leases are $3,079, which are reporting in right-of-use assets - operating leases in the unaudited condensed consolidated balance sheets. As of September 30, 2022, the Company has outstanding operating lease obligations of $3,025, of which $1,027 is reported in operating lease liabilities, current portion and $1,998 is reporting in operating lease liabilities less current portion in the Company's unaudited condensed consolidated balance sheets. The Company did not have operating leases as of December 31, 2021. The Company calculates its incremental borrowing rates for specific lease terms, used to discount future lease payments, as a function of the financing terms the Company would likely receive on the open market.

Note 7 — Leases - continued

In September 2022, the Company entered into a lease agreement for its principal corporate offices, in New York, New York. The lease agreement term is from the September 15, 2022 execution date to the date which is seven years and eight months from the lease commencement date, with the rent abated for the first eight months of the lease term. The anticipated lease commencement date is dependent upon the completion of leasehold improvements, which, as of September 30, 2022, is currently expected to be no later than March 31, 2023. The aggregate (undiscounted) rent payments are approximately $ 3.2 million over the lease term.

Note 8 — Intangible Assets, net

Intangible assets, less accumulated amortization, consisted of the following as of:

	Estimated Useful Life	September 30, 2022	December 31, 2021
Defensive asset	60 months	$ 2,105	$ 2,105
Laboratory licenses and certifications and laboratory information management software	24 months	3,200	—
Other	1 year	70	70
Total Intangible assets		5,375	2,175
Less Accumulated Amortization		(1,425)	(146)
Intangible Assets, net		$ 3,950	$ 2,029

The defensive technology intangible asset was recognized upon its acquisition of CapNostics, LLC, an unrelated third-party, for total purchase consideration paid on the October 5, 2021 acquisition date of approximately $2.1 million in cash. The CapNostics LLC transaction was accounted for as an asset acquisition, resulting in the recognition of the defensive technology intangible asset. The defensive technology intangible asset is being amortized on a straight-line basis over an expected useful life 60 months commencing on the acquisition date.

The intangible assets recognized under the APA-RDx are the laboratory licenses and certifications, inclusive of a CLIA certification, CAP accreditation, and clinical laboratory licenses for five (5) U.S. States transfer to the Company from RDx, and a laboratory information management software perpetual-use royalty-free license granted under the APA-RDx, with such intangible asset having a useful life of twenty-four months commencing on the APA-RDx February 25, 2022 transaction date.

Amortization expense of the intangible assets discussed above was $505 and $17 for the three month periods ended September 30, 2022 and 2021, respectively, and $1,278 and $23 for the nine month periods ended September 30, 2022 and 2021, respectively, and is included in general and administrative expenses in the accompanying unaudited condensed consolidated statements of operations. As of September 30, 2022, the estimated future amortization expense associated with the Company’s finite-lived intangible assets for each of the five succeeding fiscal years is as follows:

2022 (remainder of year)	$ 504
2023	2,021
2024	688
2025	421
2026	316
Total	$ 3,950

Note 9 — Commitment and Contingencies

Legal Proceedings

Delaware Court of Chancery Complaint

On November 2, 2020, a stockholder of the Company, on behalf of himself and other similarly situated stockholders, filed a complaint in the Delaware Court of Chancery alleging broker non-votes were not properly counted in accordance with the Company's bylaws at the Company's Annual Meeting of Stockholders on July 24, 2020, and, as a result, asserted certain matters deemed to have been approved were not so approved (including matters relating to the increase in the size of the PAVmed Inc. 2014 Long-Term Incentive Equity Plan and the PAVmed Inc. Employee Stock Purchase Plan). The relief sought under the complaint included certain corrective actions by the Company, but did not seek any specific monetary damages. The Company did not believe it was clear the prior approval of these matters was invalid or otherwise ineffective. However, to avoid any uncertainty and the expense of further litigation, on January 5, 2021, the Company's board of directors determined it would be advisable and in the best interests of the Company and its stockholders to re-submit these proposals to the Company's stockholders for ratification and/or approval. In this regard, the Company held a special meeting of stockholders on March 4, 2021, at which such matters were ratified and approved. The parties reached agreement on a Settlement Term Sheet Agreement, dated January 28, 2021, to settle the complaint, the terms of which did not contemplate payment of monetary damages to the putative class in the proceeding. In connection with the foregoing, on August 3, 2022, the parties agreed that plaintiff's counsel would not seek an award from the Court in excess of $450, to be paid by the Company, upon Court approval, as compensation for the benefits conferred by the settlement, and the Company would not object to an award of up to such maximum amount. The settlement and a plaintiff's fee award of $450 were approved by the Court on November 3, 2022. Such award shall become payable within 10 days of December 2, 2022, assuming no appeal is filed prior to such date. As of September 30, 2022, the Company has fully accrued for this settlement, which is included in accrued expenses and other current liabilities on the Company's unaudited condensed consolidated balance sheets.

Benchmark Investments, Inc. / Benchmark Investments LLC

On December 23, 2020, Benchmark Investments, Inc. filed a complaint against the Company in the U.S. District Court of the Southern District of New York alleging the registered direct offerings of shares of common stock of the Company completed in December 2020 were in violation of provisions set forth in an engagement letter between the Company and Kingswood Capital Markets, a "division" of Benchmark Investments, Inc. On December 16, 2021, the court granted PAVmed's motion to dismiss the case for lack of subject matter jurisdiction. On February 7, 2022, Benchmark Investments LLC, which claimed to be a successor to Benchmark Investments, Inc., filed a new complaint in the Supreme Court of the State of New York, New York County, asserting claims similar to those in the federal action, and adding to its allegations that financings conducted by the Company in January 2021 and February 2021 also violated the Company's engagement letter with Kingswood Capital Markets. The Company disagrees with the allegations set forth in the complaint and intends to vigorously contest the complaint.

Other Matters

In the ordinary course of our business, particularly as it begins commercialization of its products, the Company may be subject to certain other legal actions and claims, including product liability, consumer, commercial, tax and governmental matters, which may arise from time to time. Except as otherwise noted herein, the Company does not believe it is currently a party to any other pending legal proceedings. Notwithstanding, legal proceedings are subject-to inherent uncertainties, and an unfavorable outcome could include monetary damages, and excessive verdicts can result from litigation, and as such, could result in a material adverse impact on the Company's business, financial position, results of operations, and /or cash flows. Additionally, although the Company has specific insurance for certain potential risks, the Company may in the future incur judgments or enter into settlements of claims which may have a material adverse impact on the Company's business, financial position, results of operations, and /or cash flows.

Note 10 — Financial Instruments Fair Value Measurements

Recurring Fair Value Measurements

The fair value hierarchy table for the reporting date noted is as follows:

	Fair Value Measurement on a Recurring Basis at Reporting Date Using[1]			
	Level-1 Inputs	Level-2 Inputs	Level-3 Inputs	Total
September 30, 2022				
Senior Secured Convertible Note - April 2022	$ —	$ —	$ 23,500	$ 23,500
Senior Secured Convertible Note - September 2022	$ —	$ —	$ 12,000	$ 12,000
Totals	$ —	$ —	$ 35,500	$ 35,500

(1) As noted above, as presented in the fair value hierarchy table, Level-1 represents quoted prices in active markets for identical items, Level-2 represents significant other observable inputs, and Level-3 represents significant unobservable inputs. There were no transfers between the respective Levels during the period ended September 30, 2022.

Note 10 — Financial Instruments Fair Value Measurements - continued

As discussed in Note 11, *Debt*, the Company issued Senior Secured Convertible Notes dated April 4, 2022 and September 8, 2022, with an initial $27.5 million face value principal ("April 2022 Senior Convertible Note") and an initial $11.25 million face value principal ("September 2022 Senior Convertible Note"), respectively. Both convertible notes are accounted for under the ASC 825-10-15-4 fair value option ("FVO") election, wherein, the financial instrument is initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date.

The estimated fair value of the financial instruments classified within the Level 3 category was determined using both observable inputs and unobservable inputs. Unrealized gains and losses associated with liabilities within the Level 3 category include changes in fair value attributable to both observable (e.g., changes in market interest rates) and unobservable (e.g., changes in unobservable long- dated volatilities) inputs.

The estimated fair value of the April 2022 Senior Convertible Note as of each of April 4, 2022 and September 30, 2022, and the estimated fair value of the September 2022 Senior Convertible Note as of each of September 8, 2022 and September 30, 2022 were computed using a Monte Carlo simulation of the present value of its cash flows using a synthetic credit rating analysis and a required rate-of-return, using the following assumptions:

	April 2022 Senior Convertible Note: April 4, 2022	September 2022 Senior Convertible Note: September 8, 2022	April 2022 Senior Convertible Note: September 30, 2022	September 2022 Senior Convertible Note: September 30, 2022
Fair Value	$ 30,100	$ 12,200	$ 23,500	$ 12,000
Face value principal payable	$ 27,500	$ 11,250	$ 22,511	$ 11,250
Required rate of return	7.875%	7.875%	11.50%	11.60%
Conversion Price	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Value of common stock	$ 1.26	$ 1.21	$ 0.86	$ 0.86
Expected term (years)	2.00	2.00	1.30	1.94
Volatility	115.00%	120.00%	135.00%	135.00%
Risk free rate	2.40%	3.42%	4.02%	4.12%
Dividend yield	—%	—%	—%	—%

The estimated fair values reported utilized the Company's common stock price along with certain Level 3 inputs (as discussed above), in the development of Monte Carlo simulation models, discounted cash flow analyses, and /or Black-Scholes valuation models. The estimated fair values are subjective and are affected by changes in inputs to the valuation models and analyses, including the Company's common stock price, the Company's dividend yield, the risk-free rates based on U.S. Treasury security yields, and certain other Level-3 inputs including, assumptions regarding the estimated volatility in the value of the Company's common stock price. Changes in these assumptions can materially affect the estimated fair values.

Note 11 — Debt

The Company entered into a Securities Purchase Agreement ("SPA") dated March 31, 2022, with an accredited institutional investor ("Investor", "Lender", and /or "Holder"), wherein, the Company agreed to sell, and the Investor agreed to purchase an aggregate of $50.0 million face value principal of debt - comprised of: an initial issuance of $27.5 million face value principal; and up to an additional $22.5 million of face value principal (upon the satisfaction of certain conditions). The debt was issued in a registered direct offering under the Company's effective shelf registration statement.

Under the SPA dated March 31, 2022, the Company issued a Senior Secured Convertible Note dated April 4, 2022, referred to herein as the "April 2022 Senior Convertible Note", with such note having a $27.5 million face value principal, a 7.875% annual stated interest rate, a contractual conversion price of $5.00 per share of the Company's common stock (subject to standard adjustments in the event of any stock split, stock dividend, stock combination, recapitalization or other similar transaction), and a contractual maturity date of April 4, 2024. The April 2022 Senior Convertible Note may be converted into shares of common stock of the Company at the Holder's election.

Under the same SPA, the Company issued an additional Senior Secured Convertible Note dated September 8, 2022, referred to herein as the "September 2022 Senior Convertible Note", with such note having a $11.25 million face value principal, a 7.875% annual stated interest rate, a contractual conversion price of $5.00 per share of the Company's common stock (subject to standard adjustments in the event of any stock split, stock dividend, stock combination, recapitalization or other similar transaction), and a contractual maturity date of September 6, 2024. The September 2022 Senior Convertible Note may be converted into shares of common stock of the Company at the Holder's election.

Note 11 — Debt - continued

The April 2022 Senior Convertible Note proceeds were $25.0 million after deducting a $2.5 million lender fee; and additionally, the Company incurred total offering costs of approximately $601, inclusive of the payment of a total of $450 placement agent fees. The lender fee and offering costs were recognized as of the April 4, 2022 issue date as a current period expense in other income (expense) in the consolidated statement of operations.

The September 2022 Senior Convertible Note proceeds were $10.2 million after deducting a $1.0 million lender fee; and additionally, the Company incurred total offering costs of approximately $209, inclusive of the payment of a total of $184 placement agent fees. The lender fee and offering costs were recognized as of the September 8, 2022 issue date as a current period expense in other income (expense) in the consolidated statement of operations.

During the period from April 4, 2022 to October 3, 2022, the Company is required to pay interest expense only (on the $27.5 million face value principal), at 7.875% per annum, computed on a 360 day year. The Company paid in cash interest expense of approximately $481 and $1,005 for the three and nine month periods ended September 30, 2022, respectively; and approximately $153 subsequent to September 30, 2022 as of November 10, 2022.

During the period from September 8, 2022 to March 6, 2023, the Company is required to pay interest expense only (on the $11.25 million face value principal), at 7.875% per annum, computed on a 360 day year. The Company paid in cash interest expense of approximately $54 for both the three and nine month periods ended September 30, 2022; and approximately $76 subsequent to September 30, 2022 as of November 10, 2022.

Commencing October 4, 2022, and then on each of the successive first and tenth trading day of each month thereafter through to and including April 1, 2024 (each referred to as an “Installment Date”); and on the April 4, 2024 maturity date, the Company will be required to make a principal repayment of $724 together with accrued interest thereon, with such 38 payments referred to herein as the “Installment Amount”, settled in shares of common stock of the Company, subject to customary equity conditions, including minimum share price and volume thresholds, or at the election of the Company, in cash, in whole or in part.

Commencing March 6, 2023, and then on each of the successive first and tenth trading day of each month thereafter through to and including September 1, 2024 (each referred to as an “Installment Date”); and on the September 6, 2024 maturity date, the Company will be required to make a principal repayment of $296 together with accrued interest thereon, with such 38 payments referred to herein as the “Installment Amount”, settled in shares of common stock of the Company, subject to customary equity conditions, including minimum share price and volume thresholds, or at the election of the Company, in cash, in whole or in part.

In addition to the Installment Amount repayments, the Holder may elect to accelerate the conversion of future Installment Amount repayments, and interest thereon, subject to certain restrictions, as defined, utilizing the then current conversion price of the most recent Installment Date conversion price.

Subject to certain conditions being met or waived, from time to time, one or more additional closings may occur, for up to the remaining $11.25 million face value principal, upon five trading days’ notice given by the Company to the Investor. The Investor’s obligation to purchase the additional notes at each additional closing is subject to certain conditions set forth in the SPA dated March 31, 2022, including, among others, contractual closing requirements: minimum price and trading volume thresholds of the Company’s common stock; the maximum ratio of debt to market capitalization (as defined); and minimum market capitalization (as defined), with such requirements being waived by the Investor in its sole discretion.

Additionally, effective March 31, 2023, the Investor may by written notice elect to require the Company to issue additional notes of up to $11.25 million in face value principal, so long as in doing so it would not cause the ratio of (a) the outstanding principal amount of the April 2022 Senior Convertible Note and the September 2022 Senior Convertible Note (and any additional notes issued under the SPA dated March 31, 2022), accrued and unpaid interest thereon and accrued and unpaid late charges to (b) our average market capitalization over the prior ten trading days, to exceed 25%. If the Company does not issue the additional notes contemplated by any such written notice, or if the Investor is unable to deliver any such notice prior to March 31, 2024 as a result of the limitation described in the preceding sentence, then the Company will be obligated to pay up to a maximum of a $1.35 million a break-up fee.

The payment of all amounts due and payable under both senior convertible notes are guaranteed by the Company and its subsidiaries, except for Lucid Diagnostics Inc and its subsidiaries; and the obligations under both senior convertible notes are secured by all of the assets of the Company and each guarantor, except in the case of the Lucid Diagnostics Inc. common stock held by PAVmed Inc. only 9.99% of Lucid Diagnostics Inc.’s issued and outstanding common stock is pledged to secure the indebtedness of the convertible notes.

The Company is subject to certain customary affirmative and negative covenants regarding the rank of the notes, along with the incurrence of further indebtedness, the existence of liens, the repayment of indebtedness and the making of investments, the payment of cash in respect of dividends, distributions or redemptions, the transfer of assets, the maturity of other indebtedness, and transactions with affiliates, among other customary matters.

Note 11 — Debt - continued

The Company is subject to financial covenants requiring: (i) a minimum of $8.0 million of available cash at all times; (ii) the ratio of (a) the outstanding principal amount of the total senior convertible notes outstanding, accrued and unpaid interest thereon and accrued and unpaid late charges to (b) the Company's average market capitalization over the prior ten trading days, to not exceed 30% (except that such maximum percentage is 50% for the period from September 8, 2022 through March 5, 2023) (the "Debt to Market Cap Ratio Test"); and (iii) the Company's market capitalization to at no time be less than $75 million. (the "Market Cap Test" and, together with the Debt to Market Cap Ratio Test, the "Financial Tests"). The Company is in compliance with the above covenants.

The Company and the investor entered into a waiver dated August 9, 2022 whereby the April 2022 Senior Convertible Note was amended to permit the Investor to convert up to $5.0 million of the face value principal of the April 2022 Senior Convertible Note at the then current conversion price as if the date of conversion were an Installment Date, i.e. a price per share of common stock equal to the lower of (i) the fixed conversion price then in effect (currently $5.00) and (ii) 82.5% of the average VWAP of the Company's common stock for each of the two trading days with the lowest VWAP of the Company's common stock during the ten consecutive trading day period ending and including the trading day immediately prior to the applicable conversion date, but in the case of clause (ii), not less than $0.18 per share. As contemplated by such amendment, in August 2022, approximately $4,989 of principal repayments along with approximately $11 of interest expense thereon, were settled through the issuance of 5,013,908 shares of common stock of the Company, with such shares having a fair value of approximately $10,112 (with such fair value measured as the respective conversion date quoted closing price of the common stock of the Company). The conversions resulted in a debt extinguishment loss of $5.1 million in the three months ended September 30, 2022. Subsequent to September 30, 2022, as of November 10, 2022, approximately $424 of principal repayments along with approximately $4 of interest expense thereon, were settled through the issuance of 500,857 shares of common stock of the Company, with such shares having a fair value of approximately $536 (with such fair value measured as the respective conversion date quoted closing price of the common stock of the Company).

The fair value and face value principal outstanding of the Senior Convertible Notes as of September 30, 2022 are as follows:

	Contractual Maturity Date	Stated Interest Rate	Conversion Price per Share	Face Value Principal Outstanding	Fair Value
April 2022 Senior Convertible Note	April 4, 2024	7.875%	$ 5.00	$ 22,511	$ 23,500
September 2022 Senior Convertible Note	September 6, 2024	7.875%	$ 5.00	$ 11,250	$ 12,000
Balance as of September 30, 2022				$ 33,761	$ 35,500

The Company did not have convertible debt outstanding at December 31, 2021. During the nine month period ended September 30, 2021, the Company recognized debt extinguishment losses of approximately $3,715, in connection with repaying-in-full all remaining convertible notes outstanding at the time.

See Note 10, *Financial Instruments Fair Value Measurements*, for a further discussion of fair value assumptions.

Note 12 — Stock-Based Compensation

PAVmed Inc. 2014 Long-Term Incentive Equity Plan

The PAVmed Inc. 2014 Long-Term Incentive Equity Plan (the "PAVmed Inc. 2014 Equity Plan") is designed to enable PAVmed Inc. to offer employees, officers, directors, and consultants, as defined, an opportunity to acquire shares of common stock of PAVmed Inc. The types of awards that may be granted under the PAVmed Inc. 2014 Equity Plan include stock options, stock appreciation rights, restricted stock, and other stock-based awards subject to limitations under applicable law. All awards are subject to approval by the PAVmed Inc. board of directors.

A total of 16,352,807 shares of common stock of PAVmed Inc. are reserved for issuance under the PAVmed Inc. 2014 Equity Plan, with 2,520,927 shares available for grant as of September 30, 2022. The share reservation is not diminished by a total of 600,854 PAVmed Inc. stock options and restricted stock awards granted outside the PAVmed Inc. 2014 Equity Plan as of September 30, 2022.

PAVmed Inc. Stock Options

PAVmed Inc. stock options granted under the PAVmed Inc. 2014 Equity Plan and stock options granted outside such plan are summarized as follows:

	Number of Stock Options	Weighted Average Exercise Price	Remaining Contractual Term (Years)	Intrinsic Value[2]
Outstanding stock options at December 31, 2021	8,720,198	$ 3.39	6.8	$ 3,516
Granted[1]	4,734,350	$ 1.54		
Exercised	(299,999)	$ 1.01		
Forfeited	(1,542,978)	$ 3.13		
Outstanding stock options at September 30, 2022[3]	11,611,571	$ 2.73	7.7	$ —
Vested and exercisable stock options at September 30, 2022	6,623,157	$ 3.01	6.5	$ —

(1) Stock options granted under the PAVmed Inc. 2014 Equity Plan and those granted outside such plan generally vest ratably over twelve quarters, with the vesting commencing with the grant date quarter-end, and have a ten-year contractual term from date-of-grant.

(2) The intrinsic value is computed as the difference between the quoted price of the PAVmed Inc. common stock on each of September 30, 2022 and December 31, 2021 and the exercise price of the underlying PAVmed Inc. stock options, to the extent such quoted price is greater than the exercise price.

(3) The outstanding stock options presented in the table above, are inclusive of 500,854 stock options granted outside the PAVmed Inc. 2014 Equity Plan, as of September 30, 2022 and December 31, 2021.

Note 12 — Stock-Based Compensation - continued

PAVmed Inc. Restricted Stock Awards

PAVmed Inc. restricted stock awards granted under the PAVmed Inc. 2014 Equity Plan and restricted stock awards granted outside such plan are summarized as follows:

	Number of Restricted Stock Awards	Weighted Average Grant Date Fair Value
Unvested restricted stock awards as of December 31, 2021	1,666,666	$ 2.36
Granted	—	—
Vested	(541,666)	1.20
Forfeited	(150,000)	2.04
Unvested restricted stock awards as of September 30, 2022[1]	975,000	$ 3.05

(1) The unvested restricted stock awards presented in the table above, are inclusive of 100,000 restricted stock awards granted outside the PAVmed Inc. 2014 Equity Plan as of September 30, 2022 and December 31, 2021.

Lucid Diagnostics Inc. 2018 Long-Term Incentive Equity Plan

The Lucid Diagnostics Inc. 2018 Long-Term Incentive Equity Plan ("Lucid Diagnostics Inc. 2018 Equity Plan") is separate and apart from the PAVmed Inc. 2014 Equity Plan discussed above. The Lucid Diagnostics Inc. 2018 Equity Plan is designed to enable Lucid Diagnostics Inc. to offer employees, officers, directors, and consultants, as defined, an opportunity to acquire shares of common stock of Lucid Diagnostics Inc. The types of awards that may be granted under the Lucid Diagnostics Inc. 2018 Equity Plan include stock options, stock appreciation rights, restricted stock, and other stock-based awards subject to limitations under applicable law. All awards are subject to approval by the Lucid Diagnostics Inc. board of directors.

A total of 9,144,000 shares of common stock of Lucid Diagnostics Inc. are reserved for issuance under the Lucid Diagnostics Inc. 2018 Equity Plan, with 3,754,051 shares available for grant as of September 30, 2022. The share reservation is not diminished by a total of 423,300 stock options and 50,000 restricted stock awards granted outside the Lucid Diagnostics Inc. 2018 Equity Plan, as of September 30, 2022.

Lucid Diagnostics Inc. Stock Options

Lucid Diagnostics Inc. stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan and stock options granted outside such plan are summarized as follows:

	Number of Stock Options	Weighted Average Exercise Price	Remaining Contractual Term (Years)	Intrinsic Value[2]
Outstanding stock options at December 31, 2021	1,419,242	$ 0.73	7.0	$ 6,665
Granted[1]	2,320,000	$ 3.71		
Exercised	(964,717)	$ 0.72		
Forfeited	(141,436)	$ 4.33		
Outstanding stock options at September 30, 2022[3]	2,633,089	$ 3.17	8.6	$ 499
Vested and exercisable stock options at September 30, 2022	960,364	$ 2.33	7.2	$ 499

(1) Stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan and those granted outside such plan generally vest ratably over twelve quarters, with the vesting commencing with the grant date quarter-end, and have a ten-year contractual term from date-of-grant.

(2) The intrinsic value is computed as the difference between the quoted price of the Lucid Diagnostics Inc. common stock on each of September 30, 2022 and December 31, 2021 and the exercise price of the underlying Lucid Diagnostics Inc. stock options, to the extent such quoted price is greater than the exercise price.

(3) The outstanding stock options presented in the table above, are inclusive of 423,300 stock options granted outside the Lucid Diagnostics Inc. 2018 Equity Plan, as of September 30, 2022 and December 31, 2021.

Note 12 — Stock-Based Compensation - continued

Lucid Diagnostics Inc. Restricted Stock Awards

Lucid Diagnostics Inc. restricted stock awards granted under the Lucid Diagnostics Inc. 2018 Equity Plan and restricted stock awards granted outside such plan are summarized as follows:

	Number of Restricted Stock Awards	Weighted Average Grant Date Fair Value
Unvested restricted stock awards as of December 31, 2021	1,940,740	$ 12.76
Granted	320,000	4.53
Vested	(169,320)	13.48
Forfeited	—	—
Unvested restricted stock awards as of September 30, 2022[(1)]	2,091,420	$ 11.44

(1) The unvested restricted stock awards presented in the table above, are inclusive of 50,000 restricted stock awards granted outside the Lucid Diagnostics Inc. 2018 Equity Plan as of September 30, 2022 and December 31, 2021.

On January 7, 2022, 320,000 restricted stock awards were granted under the Lucid Diagnostics Inc 2018 Equity Plan, with such restricted stock awards having a single vesting date on January 7, 2025, and an aggregate grant date fair value of approximately $1.4 million, measured as the grant date closing price of Lucid Diagnostics Inc. common stock, with such aggregate estimated fair value recognized as stock-based compensation expense ratably on a straight-line basis over the vesting period, which is commensurate with the service period. The restricted stock awards are subject to forfeiture if the requisite service period is not completed.

Consolidated Stock-Based Compensation Expense

The consolidated stock-based compensation expense recognized by each of PAVmed Inc. and Lucid Diagnostics Inc. for both the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan, with respect to stock options and restricted stock awards as discussed above, for the periods indicated, was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Cost of revenue	$ 9	$ —	$ 9	$ —
Sales and marketing expenses	643	327	1,859	814
General and administrative expenses	3,854	3,353	12,016	9,088
Research and development expenses	258	310	699	727
Total stock-based compensation expense	$ 4,764	$ 3,990	$ 14,583	$ 10,629

Note 12 — Stock-Based Compensation - continued

Stock-Based Compensation Expense Recognized by Lucid Diagnostics Inc.

As noted, the consolidated stock-based compensation expense presented above is inclusive of stock-based compensation expense recognized by Lucid Diagnostics Inc., inclusive of each of: stock options granted under the PAVmed Inc. 2014 Equity Plan to the three physician inventors of the intellectual property underlying the CWRU License Agreement ("Physician Inventors") (as discussed above in Note 4, *Related Party Transactions*); and stock options and restricted stock awards granted to employees of PAVmed Inc. and non-employee consultants under the Lucid Diagnostics Inc. 2018 Equity Plan. The stock-based compensation expense recognized by Lucid Diagnostics Inc. for both the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan, with respect to stock options and restricted stock awards as discussed above, for the periods indicated, was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Lucid Diagnostics Inc 2018 Equity Plan – cost of revenue	$ 9	$ —	$ 9	$ —
Lucid Diagnostics Inc 2018 Equity Plan – sales and marketing expenses	253	—	733	—
Lucid Diagnostics Inc 2018 Equity Plan – general and administrative expenses	2,990	2,695	9,504	5,988
Lucid Diagnostics Inc 2018 Equity Plan – research and development expenses	28	21	125	57
PAVmed Inc 2014 Equity Plan - sales and marketing expenses	161	—	497	—
PAVmed Inc 2014 Equity Plan - general and administrative expenses	78	—	224	—
PAVmed Inc 2014 Equity Plan - research and development expenses	52	56	159	111
Total stock-based compensation expense – recognized by Lucid Diagnostics Inc	$ 3,571	$ 2,772	$ 11,251	$ 6,156

The consolidated unrecognized stock-based compensation expense and weighted average remaining requisite service period with respect to stock options and restricted stock awards issued under each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan, as discussed above, is as follows:

	Unrecognized Expense	Weighted Average Remaining Service Period (Years)
PAVmed Inc. 2014 Equity Plan		
Stock Options	$ 8,424	2.1
Restricted Stock Awards	$ 1,222	0.9
Lucid Diagnostics Inc. 2018 Equity Plan		
Stock Options	$ 3,791	2.4
Restricted Stock Awards	$ 7,165	0.8

Note 12 — Stock-Based Compensation - continued

Stock-based compensation expense recognized with respect to stock options granted under the PAVmed Inc. 2014 Equity Plan was based on a weighted average estimated fair value of such stock options of $1.08 per share and $3.47 per share during the periods ended September 30, 2022 and 2021, respectively, calculated using the following weighted average Black-Scholes valuation model assumptions:

	Nine Months Ended September 30,	
	2022	**2021**
Expected term of stock options (in years)	5.8	5.6
Expected stock price volatility	86.0%	76.0%
Risk free interest rate	2.9%	0.9%
Expected dividend yield	—%	—%

Stock-based compensation expense recognized with respect to stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan was based on a weighted average estimated fair value of such stock options of $1.61 per share during the period ended September 30, 2022. The stock-based compensation was calculated using the following weighted average Black-Scholes valuation model assumptions:

	Nine Months Ended September 30,
	2022
Expected term of stock options (in years)	5.8
Expected stock price volatility	72.0%
Risk free interest rate	3.2%
Expected dividend yield	—%

PAVmed Inc. Employee Stock Purchase Plan ("ESPP")

A total of 194,240 shares and 203,480 shares of common stock of the Company were purchased for proceeds of approximately $218 and $304, on March 31, 2022 and 2021, respectively under the PAVmed Inc Employee Stock Purchase Plan ("PAVmed Inc ESPP"). A total of 191,698 shares and 31,112 shares of common stock of the Company were purchased for proceeds of approximately $140 and $131, on September 30, 2022 and 2021, respectively under the PAVmed Inc ESPP. The September 30, 2022 purchase was settled through the redeployment of treasury stock, and did not reduce the number of shares available-for-issue under the PAVmed Inc ESPP. The PAVmed Inc. ESPP has a total reservation of 1,750,000 shares of common stock of PAVmed Inc. of which 931,841 shares are available-for-issue as of September 30, 2022.

Lucid Diagnostics, Inc Employee Stock Purchase Plan ("ESPP")

The Lucid Diagnostics Inc Employee Stock Purchase Plan ("Lucid Diagnostics Inc ESPP"), initial six-month stock purchase period was April 1, 2022 to September 30, 2022. A total of 84,030 shares of common stock of Lucid Diagnostics Inc were purchased for proceeds of approximately $109 on September 30, 2022 under the Lucid Diagnostics Inc. ESPP. The Lucid Diagnostics Inc. ESPP has a total reservation of 500,000 shares of common stock of Lucid Diagnostics Inc. of which 415,970 shares are available-for-issue as of September 30, 2022.

Note 13 — Preferred Stock

As of September 30, 2022 and December 31, 2021, there were 1,182,101 and 1,113,919 shares of Series B Convertible Preferred Stock (classified in permanent equity) issued and outstanding, respectively.

Series B Convertible Preferred Stock Dividends

The Series B Convertible Preferred Stock dividends are 8.0% per annum based on the $3.00 per share stated value of the Series B Convertible Preferred Stock, with such dividends compounded quarterly, accumulate, and are payable in arrears upon being declared by the Company's board of directors, with the dividends earned from April 1, 2018 through October 1, 2021 payable-in-kind ("PIK") by the issue of additional shares of Series B Convertible Preferred Stock; and after October 1, 2021, dividends may be settled, at the election of the discretion of the board of directors, through any combination of the issue of shares of Series B Convertible Preferred Stock, the issue shares of common stock of the Company, and /or cash payment.

Series B Convertible Preferred Stock Dividends Earned

The Series B Convertible Preferred Stock dividends earned are included in the calculation of basic and diluted net loss attributable to PAVmed Inc. common stockholders for each of the respective corresponding periods presented in the accompanying unaudited condensed consolidated statement of operations, inclusive of dividends earned as of each of March 31, 2022, June 30, 2022, and September 30, 2022, of approximately $71 and $209 in the three and nine months ended September 30, 2022, respectively. The prior year unaudited condensed consolidated statement of operations, inclusive of dividends earned as of each of March 31, 2021, June 30, 2021, and September 30, 2021 of approximately $67 and $216 in the three and nine months ended September 30, 2021, respectively.

Series B Convertible Preferred Stock Dividends Declared

The Series B Convertible Preferred Stock dividends are recognized as a dividend payable only upon the dividend being declared payable by the Company's board of directors. In this regard, in the nine months ended September 30, 2022, the Company's board-of-directors declared Series B Convertible Preferred Stock dividends of an aggregate of approximately $204, inclusive of approximately $67 earned as of December 31, 2021, and approximately $68 earned as of March 31, 2022, and approximately $69 earned as of June 30, 2022; with each such dividends settled by the issue of an aggregate 68,227 additional shares of Series B Convertible Preferred Stock, inclusive of: 22,291 shares issued with respect to the dividends earned as of December 31, 2021; 22,740 shares issued with respect to the dividends earned as of March 31, 2022; and 23,196 shares issued with respect to the dividends earned as of June 30, 2022.

In the nine months ended September 30, 2021, the Company's board-of-directors declared Series B Convertible Preferred Stock dividends of an aggregate of approximately $221, inclusive of approximately $73 earned as of December 31, 2020; approximately $75 earned as of March 31, 2021; and approximately $74 earned as of June 30, 2021; with each such dividends settled by the issue of an aggregate 73,821 additional shares of Series B Convertible Preferred Stock, inclusive of: 24,198 shares issued with respect to the dividends earned as of December 31, 2020; 25,046 shares issued with respect to the dividends earned as of March 31, 2021; and 24,577 shares issued with respect to the dividends earned as of June 30, 2021.

Subsequent to September 30, 2022, in October 2022, the Company's board-of-directors declared a Series B Convertible Preferred Stock dividend earned as of September 30, 2022 and payable as of October 1, 2022, of approximately $71, to be settled by the issue of an additional 23,658 shares of Series B Convertible Preferred Stock (with such dividend not recognized as a dividend payable as of September 30, 2022, as the Company's board of directors had not declared such dividends payable as of such date). In the prior year October 2021, the Company's board-of-directors declared a Series B Convertible Preferred Stock dividend earned as of September 30, 2021 and payable as of October 1, 2021, of approximately $67, settled by the issue of an additional 22,471 shares of Series B Convertible Preferred Stock.

Note 14 — Common Stock and Common Stock Purchase Warrants

Common Stock

In June 2022, the Company received shareholder approval to issue up to 250 million shares of its common stock, an increase of 100 million shares.

During the nine months ended September 30, 2022, 299,999 shares of common stock of the Company were issued upon exercise of stock options for cash of approximately $302; and during the nine months ended September 30, 2022 a total of 385,938 shares of common stock of the Company were issued under the PAVmed Inc. Employee Stock Purchase Plan ("ESPP"). See Note 12, *Stock-Based Compensation*, for a discussion of each of the PAVmed Inc. 2014 Equity Plan and the PAVmed Inc. ESPP.

In August 2022, 5,103,908 shares of the Company's common stock were issued upon conversion, at the election of the holder, of the April 2022 Senior Convertible Note for $4,989 face value principal repayments, along with approximately $11 of interest thereon, as discussed in Note 11, *Debt*.

Common Stock Purchase Warrants

As of September 30, 2022 and December 31, 2021, Series Z Warrants outstanding totaled 11,937,450 and 11,937,455, respectively. A Series Z Warrant is exercisable to purchase one share of common stock of the Company at an exercise price of $1.60 per share, and expire April 30, 2024. During the nine months ended September 30, 2022, a total of 5 Series Z Warrants were exercised for cash at $1.60 per share, resulting in the issue of the same number of shares of common stock of the Company.

As of December 31, 2021, Series W Warrants outstanding totaled 377,873. The remaining 377,873 Series W Warrants expired unexercised as of January 29, 2022.

Note 15 — Noncontrolling Interest

The noncontrolling interest ("NCI") included as a component of consolidated total stockholders' equity is summarized for the periods indicated as follows:

	September 30, 2022	December 31, 2021
NCI – equity (deficit) – beginning of period	$ 17,752	$ (2,369)
Investment in Veris Health Inc.	—	6
Net loss attributable to NCI – Lucid Diagnostics Inc.	(9,032)	(5,779)
Net loss attributable to NCI – Solys Diagnostics Inc.	(6)	—
Net loss attributable to NCI – Veris Health Inc.	(1,105)	—
Impact of subsidiary equity transactions	(1,375)	16,760
Lucid Diagnostics Inc. proceeds from Committed Equity Facility, net of deferred financing charges	1,767	—
Lucid Diagnostics Inc. issuance of common stock for settlement of APA-RDx installment payment	427	—
Lucid Diagnostics Inc. 2018 Equity Plan stock option exercise	694	—
Lucid Diagnostics Inc. Employee Stock Purchase Plan Purchase	109	—
Stock-based compensation expense - Lucid Diagnostics Inc. 2018 Equity Plan	10,371	9,134
Stock-based compensation expense - Veris Health Inc. 2021 Equity Plan	6	—
NCI – equity (deficit) – end of period	$ 19,608	$ 17,752

The consolidated NCI presented above is with respect to the Company's consolidated majority-owned subsidiaries, inclusive of: Lucid Diagnostics Inc., Veris Health Inc. and Solys Diagnostics Inc., as a component of consolidated total stockholders' equity as of September 30, 2022 and December 31, 2021; and the recognition of a net loss attributable to the NCI in the unaudited condensed consolidated statement of operations with respect to Lucid Diagnostics Inc. and Solys Diagnostics Inc. for the three and nine months ended September 30, 2022 and 2021; and with respect to Veris Health Inc. for the three and nine months ended September 30, 2022 and from the period of May 28, 2021 to September 30, 2021 (as the Veris Health Inc. inception date was May 28, 2021).

Lucid Diagnostics Inc.

As of September 30, 2022, there were 37,016,225 shares of common stock of Lucid Diagnostics Inc. issued and outstanding, of which, PAVmed Inc. holds 27,927,190 shares, representing a majority ownership equity interest and PAVmed Inc. has a controlling financial interest in Lucid Diagnostics Inc., and accordingly, Lucid Diagnostics Inc. is a consolidated majority-owned subsidiary of PAVmed Inc.

On March 28, 2022, Lucid Diagnostics, Inc. entered into a committed equity facility with an affiliate of Cantor Fitzgerald ("Cantor"). Under the terms of the committed equity facility, Cantor has committed to purchase up to $50 million of Lucid Diagnostics Inc. common stock from time to time at the request of Lucid Diagnostics Inc. While there are distinct differences, the facility is structured similarly to a traditional at-the-market equity facility, insofar as it allows the Company to raise primary equity capital on a periodic basis at prices based on the existing market price. As of September 30, 2022, under the committed equity facility, a total of 680,263 shares of common stock of Lucid Diagnostics Inc. were issued for proceeds of approximately $1,807.

Veris Health Inc.

As of September 30, 2022, there were 8,000,000 shares of common stock of Veris Health Inc. issued and outstanding, of which PAVmed Inc. holds an 80.44% majority-interest ownership and PAVmed Inc. has a controlling financial interest, with the remaining 19.56% minority-interest ownership held by an unrelated third-party. Accordingly, Veris Health Inc. is a consolidated majority-owned subsidiary of the Company, for which a provision of a noncontrolling interest (NCI) is included as a separate component of consolidated stockholders' equity in the unaudited condensed consolidated balance sheet as of September 30, 2022 along with the recognition of a net loss attributable to the NCI in the unaudited condensed consolidated statement of operations for the period of May 28, 2021 to December 31, 2021, upon its formation and contemporaneous acquisition of Oncodisc Inc.

Solys Diagnostics Inc.

As of each of September 30, 2022 and December 31, 2021, there were 9,189,190 shares of common stock of Solys Diagnostics Inc. issued and outstanding, of which PAVmed Inc. holds a 90.3235% majority-interest ownership and PAVmed Inc. has a controlling financial interest, with the remaining 9.6765% minority-interest ownership held by unrelated third parties.

Note 16 — Net Loss Per Share

The "Net loss per share - attributable to PAVmed Inc. - basic and diluted" and "Net loss per share - attributable to PAVmed Inc. common stockholders - basic and diluted" - for the respective periods indicated - is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator				
Net loss - before noncontrolling interest	$ (29,932)	$ (13,668)	$ (78,666)	$ (36,447)
Net loss attributable to noncontrolling interest	3,806	1,441	10,143	3,318
Net loss - as reported, attributable to PAVmed Inc.	$ (26,126)	$ (12,227)	$ (68,523)	$ (33,129)
Series B Convertible Preferred Stock dividends – earned	$ (71)	$ (67)	$ (209)	$ (216)
Net loss attributable to PAVmed Inc. common stockholders	$ (26,197)	$ (12,294)	$ (68,732)	$ (33,345)
Denominator				
Weighted average common shares outstanding, basic and diluted	89,758,927	83,307,170	87,724,124	79,873,583
Net loss per share				
Basic and diluted				
Net loss - as reported, attributable to PAVmed Inc.	$ (0.29)	$ (0.15)	$ (0.78)	$ (0.41)
Net loss attributable to PAVmed Inc. common stockholders	$ (0.29)	$ (0.15)	$ (0.78)	$ (0.42)

The common stock equivalents have been excluded from the computation of diluted weighted average shares outstanding as their inclusion would be anti-dilutive, are as follows:

The Series B Convertible Preferred Stock dividends earned as of each of the respective periods noted, are included in the calculation of basic and diluted net loss attributable to PAVmed Inc. common stockholders for each respective period presented. Notwithstanding, the Series B Convertible Preferred Stock dividends are recognized as a dividend payable only upon the dividend being declared payable by the Company's board of directors.

Basic weighted-average number of shares of common stock outstanding for the periods ended September 30, 2022 and 2021 include the shares of the Company issued and outstanding during such periods, each on a weighted average basis. The basic weighted average number of shares of common stock outstanding excludes common stock equivalent incremental shares, while diluted weighted average number of shares outstanding includes such incremental shares. However, as the Company was in a loss position for all periods presented, basic and diluted weighted average shares outstanding are the same, as the inclusion of the incremental shares would be anti-dilutive. The common stock equivalents excluded from the computation of diluted weighted average shares outstanding are as follows:

	September 30,	
	2022	2021
Stock options and restricted stock awards	12,586,571	10,214,448
Series Z Warrants	11,937,450	13,887,814
Series W Warrants	—	377,873
Series B Convertible Preferred Stock	1,182,101	1,091,448
Total	25,706,122	25,571,583

The total stock options and restricted stock awards are inclusive of 500,854 stock options as of September 30, 2022 and 2021; and 100,000 restricted stock awards as of September 30, 2022, granted outside the PAVmed Inc. 2014 Equity Plan.

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

The following discussion and analysis of our unaudited condensed consolidated financial condition and results of operations should be read together with our Annual Report on Form 10-K for the year ended December 31, 2021 (the "Form 10-K") as filed with the Securities and Exchange Commission (the "SEC").

Unless the context otherwise requires, references herein to "we", "us", and "our", and to the "Company" or "PAVmed" are to PAVmed Inc. and Subsidiaries, including its majority-owned subsidiaries, including Lucid Diagnostics Inc. ("Lucid Diagnostics" or "LUCID") and Veris Health Inc. ("Veris Health" or "VERIS").

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (this "Form 10-Q"), including the following discussion and analysis of our (unaudited) condensed consolidated financial condition and results of operations, contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this Form 10-Q, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements are not guarantees of future performance and the Company's actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in Item 1A of Part I of the Form 10-K under the heading "Risk Factors."

Important factors that may affect our actual results include:

- our limited operating history;
- our financial performance, including our ability to generate revenue;
- our ability to obtain regulatory approval for the commercialization of our products;
- the ability of our products to achieve market acceptance;
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors;
- our potential ability to obtain additional financing when and if needed;
- our ability to protect our intellectual property;
- our ability to complete strategic acquisitions;
- our ability to manage growth and integrate acquired operations;
- the potential liquidity and trading of our securities;
- our regulatory and operational risks;
- cybersecurity risks;
- risks related to the COVID-19 pandemic; and
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

In addition, our forward-looking statements do not reflect the potential impact of any future financings, acquisitions, mergers, dispositions, joint ventures or investments we may make.

We may not actually achieve the plans, intentions, and/or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. You should read this Form 10-Q and the Form 10-K, and the documents we have filed as exhibits to this Form 10-Q and the Form 10-K, completely and with the understanding our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

Overview

The Company is a highly differentiated, multi-product, commercial-stage medical technology company organized to advance a broad pipeline of innovative medical technologies from concept to commercialization, employing a business model focused on capital efficiency and speed to market. Since the Company's inception on June 26, 2014, its activities have focused on advancing its lead products through regulatory approval, expanding commercial operations, and protecting its intellectual property, while building its corporate infrastructure and management team. The Company has ongoing operations conducted both through PAVmed Inc. and its majority-owned subsidiaries.

The Company operates in one segment as a medical technology company, with the following lines of business: Diagnostics, Medical Devices and Digital Health.

Our products and services in each line of business, as discussed below and in Item 1 of Part I of the Form 10-K under the heading "Business Background and Overview," are as follows:

- Diagnostics - EsoGuard Esophageal DNA Test and EsoCheck Esophageal Cell Collection Device;
- Medical Devices - CarpX Minimally Invasive Surgical Device for Carpal Tunnel Syndrome; EsoCure Esophageal Ablation Device with Caldus Technology, and PortIO Implantable Intraosseous Vascular Access Device;
- Digital Health - Veris Cancer Care Platform with implantable smart device, remote monitoring and data analytics.

We are also pursuing a number of research and development project and product opportunities across these three lines of business, which have either been developed internally or have been presented to us by clinician innovators and academic medical institutions for consideration.

Our products and services are in various phases of development, regulatory approval and commercialization, as follows:

EsoGuard and EsoCheck

- We believe that the EsoGuard Esophageal DNA Test, performed on samples collected with the EsoCheck Esophageal Cell Collection Device, constitutes the first and only commercially available diagnostic test capable of serving as a widespread screening tool to prevent esophageal adenocarcinoma ("EAC") deaths, through early detection of esophageal precancer in at-risk gastroesophageal reflux disease ("GERD," also commonly known as chronic heartburn, acid reflux or simply reflux) patients. The Company has advanced the proprietary technologies underlying EsoGuard and EsoCheck from the academic research laboratory to commercial diagnostics tests and devices with scalable manufacturing capacity. The Company is presently focused on expanding commercialization across multiple sales channels, including the communication and education of medical practitioners and clinicians of EsoGuard and the establishment of "Lucid Diagnostics Test Centers" for the collection of cell samples using EsoCheck. Previously the collected cell samples were sent to ResearchDx Inc. ("RDx"), an unrelated third-party Clinical Laboratory Improvement Amendments ("CLIA") certified commercial laboratory service provider, for the performance of EsoGuard. On February 25, 2022, Lucid Diagnostics' wholly owned subsidiary, LucidDx Labs Inc. ("LucidDx Labs") acquired from RDx certain licenses and other related assets necessary for LucidDx Labs to operate its own new CLIA certified, College of American Pathologists ("CAP") accredited clinical laboratory located in Lake Forest, CA. RDx was previously responsible for submitting claims for EsoGuard tests performed and was receiving out-of-network private insurance payments. As part of the transition to our own lab, we also contracted with a revenue cycle management ("RCM") provider to submit claims on our behalf. The RCM provider has joint oversight of payer claims, appeals processes, patient billing, online payment collection, and claims tracking. At the point when submission by the RCM began in August 2022, more than 2,000 claims had accumulated since the commencement of our CLIA laboratory operations (LucidDX Labs, on February 25, 2022). These claims and other claims that were subsequently generated are now being processed, including 1,088 tests in the three months ended September 30, 2022. Refer to Note 3 of our Condensed Consolidated Financial Statements for more information on Revenue from Contracts with Customers.

- In April 2022, the American College of Gastroenterology ("ACG") updated its clinical guideline to support esophageal precancer ("Barrett's Esophagus", "BE") screening to prevent highly lethal esophageal cancer ("EAC") utilizing Lucid Diagnostics' EsoGuard Esophageal DNA Test on samples collected with our EsoCheck Cell Collection Device. The clinical guideline reiterates the ACG's long-standing recommendation for esophageal precancer screening in at-risk patients with GERD. In its Recommendation 5, the ACG suggests a single screening endoscopy in patients with chronic GERD symptoms and 3 or more additional risk factors for BE, including male sex, age greater than 50 years, White race, tobacco smoking, obesity, and family history of BE or EAC in a first-degree relative. Furthermore, and importantly for the first time, the clinical guideline also endorses nonendoscopic biomarker screening as an acceptable alternative to costly and invasive endoscopy by stating in its Recommendation 6 that the ACG suggests that a swallowable, nonendoscopic capsule device combined with a biomarker is an acceptable alternative to endoscopy for screening for BE. The clinical guideline specifically mentions EsoCheck, along with our EsophaCap device, as such swallowable, nonendoscopic esophageal cell collection devices. The clinical guideline also mentions methylated DNA markers (like those detected by the EsoGuard test) as such a biomarker. The summary of evidence for this recommendation includes a reference to the seminal NIH-funded, multicenter, case-control study published in 2018 in Science Translational Medicine, which demonstrated that EsoGuard is highly accurate at detecting esophageal precancer and cancer, including on samples collected with EsoCheck.

Overview - continued

- In July 2022, the American Gastroenterology Association ("AGA") published updated clinical guidance that mirrors the same furnished by the ACG as described above, endorsing the use of non-invasive screening tools like our EsoCheck Cell Collection Device, which is cited in its guideline, as an acceptable alternative to endoscopy to directly address the need for noninvasive screening tools that are easy to administer, patient friendly, and cost-effective for the detection of BE. The clinical practice update by the AGA also significantly expands the target population for esophageal precancer screening, including for EsoGuard and EsoCheck, by recommending, for the first time, screening in at-risk patients without symptoms of reflux. The AGA does so by adding a history of chronic GERD as merely an additional, seventh, risk factor to the six risk factors for BE and EAC that have traditionally identified at-risk symptomatic patients recommended for screening. As a result, chronic symptomatic GERD is no longer a mandatory prerequisite and asymptomatic patients with three of the other six risk factors (e.g., male sex, age greater than 50 years, White race, tobacco smoking, obesity, and family history of BE) are now considered at-risk patients recommended for screening.

- In 2021 the Lucid Diagnostics Inc. began conducting two concurrent clinical trials, the "EsoGuard screening study" ("BE-1") and the "EsoGuard case-control study" ("BE-2"), to expand the clinical evidence for the technologies and to support a United States Food and Drug Administration ("FDA") pre-market approval ("PMA") application of the use of EsoGuard and EsoCheck as an in-vitro diagnostic medical device ("IVD"). However, in light of the recently published proposed Local Coverage Determination ("LCD") DL39256, the recently updated AGA guidance, and the ACG update to its clinical guideline that supports screening to prevent highly lethal esophageal cancer ("EAC") utilizing a biomarker test like EsoGuard on samples collected with a swallowable, nonendoscopic capsule device like EsoCheck, the Company has determined to prioritize its clinical trial efforts and resources towards supporting studies that will help secure insurance reimbursement adoption for EsoGuard and EsoCheck by government and private insurers. Consequently, we have decided to delay for the time being the BE-1 trial while continuing to enroll GERD patients with a previous diagnosis of nondysplastic BE, low grade dysplasia, high grade dysplasia, or EAC in the BE-2 case-control study through Q2 2023.

CarpX

- CarpX is a minimally invasive surgical device for use in the treatment of carpal tunnel syndrome which received FDA 510(k) marketing clearance in April 2020. Our limited-release commercialization efforts through 2022 are focused on engaging key opinion hand surgeons designed to solicit input for ergonomic improvements to the device, procedure development and surgical-time optimization, and ease of use. As a result of this clinical input, we have initiated a product development project to incorporate intraluminal ultrasound into the device to include real time imaging of the ligament to be cut together with critical anatomic structures. The design and development work, including cadaver testing is expected to culminate in a FDA submission and clearance in 2023.

Veris Health

- In May 2021, we formed Veris Health, and concurrently, acquired Oncodisc Inc. ("Oncodisc"), a digital health company with ground breaking tools to improve personalized cancer care through remote patient monitoring, which we now refer to as our Veris Cancer Care Platform. The core technologies incorporated in the Veris Cancer Care Platform include the first intelligent implantable vascular healthcare platform that provides patients and physicians with new tools to improve outcomes and optimize the delivery of cost-effective care through remote monitoring and data analytics. Its vascular access port contains biologic sensors capable of generating continuous data on key physiologic parameters known to predict adverse outcomes in cancer patients undergoing treatment. Wireless communication to the patient's smartphone and its cloud-based digital healthcare platform efficiently and effectively will deliver actionable real time data to patients and physicians. The technologies are the subject of multiple patent applications and one allowed patent awaiting final issuance. We plan to seek commercialization of the implantable device through a FDA 510(k) process, and, as such, we will begin to commercialize the digital health offering in three phases which include software, device, and data. The initial launch will be in conjunction with a package we are calling Veris Solar, with Veris branded OEM Bluetooth enabled connected health care devices. The next product, which we call Veris Mercury, is an implantable physiologic monitor designed to be implanted in conjunction with a traditional vascular access port for chemotherapy or other treatments. We have recently completed a successful pre-submission meeting with the FDA, which provided us with an outline for a clear path to 510(k) clearance of Veris Mercury with a submission in 2023 (although there can be no assurance as to product clearance). Veris Venus will be the third product in the development process which will include full integration of the implantable monitor with the vascular access port. We are working with the FDA to finalize the regulatory path for Veris Venus to determine if it will be a 510(k) submission or a de novo pathway.

Overview - continued

EsoCure

- In connection with our efforts to expand our presence in the EAC diagnostic market, we are also developing the EsoCure Esophageal Ablation Device, with the intent to allow a clinician to treat dysplastic BE before it can progress to EAC, a highly lethal esophageal cancer, and to do so without the need for complex and expensive capital equipment. We have successfully completed a pre-clinical feasibility animal study of EsoCure demonstrating excellent, controlled circumferential ablation of the esophageal mucosal lining. An acute and survival animal study of EsoCure Esophageal Ablation Device has also been completed, demonstrating successful direct thermal balloon catheter ablation of esophageal lining through the working channel of a standard endoscope. We plan to conduct additional development work and animal testing of EsoCure to support a future FDA 510(k) submission.

PortIO

- PortIO is an implantable intraosseous vascular access device that is being developed as a means for infusing fluids, medications, and other substances directly into the bone marrow cavity and from there into the central venous circulation. We are pursuing an FDA clearance for use in patients with a need for longer-term vascular access under de novo classification of section 513(f)2 of the FDCA. The broader clearance is being pursued in discussion with FDA following our previous initial submission to the FDA for a 510(k) premarket notification for use in patients only requiring 24-hour emergency type vascular access. PortIO completed its first-in-human clinical study in Colombia, South America, and has earlier this year successfully implanted seven additional patients for a series of infusions over seven days and a successful explant of the device. The next set of patients will have device implanted for 60 days which will influence the regulatory path of pursuing a CE Mark in Europe or to proceed with a US IDE trial. Recruitment of these patients is underway.

Recent Developments

Business

EsoCheck Manufacturing Update

On October 4, 2022, Lucid completed its first full day of manufacturing of EsoCheck at Coastline International, a high-volume manufacturing company. Through mid-2023, we expect to transition from our current manufacturer, Sage Product Development, to Coastline International as the manufacturing process is further optimized.

EsoCheck Cell Collection Device Update

In October 2022, the FDA announced they completed their review of the EsoCheck 510(k) (#K222366) premarket notification of intent to market the device and granted the use of the EsoCheck Cell Collection Device for the collection and retrieval of surface cells of the esophagus in the general population of adults and adolescents, 12 years of age and older. This action by the FDA now expands the targeted US patient population to include adolescents not previously covered by the Company's initial EsoCheck 510(k) clearance.

Veris Health Update

At the end of August, we moved our software platform from a development environment to a production environment. At the same time, we initiated our HIPAA and SOC2 audits which were completed in October. During the quarter we completed a presubmission meeting with the FDA, outlining a clear regulatory pathway for our first intelligent implantable device.

New Opportunities - Novosound Agreement

In October 2022, PAVmed entered into an option agreement with Novosound Ltd, a Scottish company specializing in the design and manufacturing of ultrasound sensors using a proprietary thin-film technique. Pursuant to the terms of the agreement, PAVmed and Novosound will collaborate on an research and development project leveraging Novosound's ultrasound platform technology for development of novel intravascular ultrasound ("IVUS") imaging devices, with PAVmed having the option to license the technology on an exclusive basis for use in intravascular imaging.

Recent Developments - continued

Financing

Securities Purchase Agreement - March 31, 2022 - Senior Secured Convertible Note - April 4, 2022 and Senior Secured Convertible Note - September 8, 2022

Effective as of March 31, 2022, we entered into a Securities Purchase Agreement ("SPA") with an accredited institutional investor ("Investor", "Lender", and /or "Holder"), pursuant to which we agreed to sell, and the Investor agreed to purchase an aggregate of $50.0 million face value principal of Senior Secured Convertible Notes. The SPA provided for the sale to the Investor of an initial Senior Secured Convertible Note with a face value principal of $27.5 million, which closed on April 4, 2022 (the "April 2022 Senior Convertible Note"). The SPA also provided for sales of additional Senior Secured Convertible Notes in one or more additional closings (upon the satisfaction of certain conditions), with an aggregate face value principal of up to an additional $22.5 million. The April 2022 Senior Convertible Note proceeds were $24.4 million after deducting a $2.5 million lender fee and the Company's offering costs of approximately $0.6 million, inclusive primarily of $0.5 million placement agent fees.

On September 8, 2022, we completed an additional closing under the SPA, in which we sold to the Investor an additional Senior Secured Convertible Note with a face value principal of $11.25 million (the "September 2022 Senior Convertible Note"). The September 2022 Senior Convertible Note proceeds were $10.0 million after deducting a $1.0 million lender fee and the Company's offering costs of approximately $0.2 million, inclusive primarily of placement agent fees.

See our accompanying unaudited condensed consolidated financial statements Note 11, *Debt*, for further discussion of the SPA dated March 31, 2022 and the senior convertible notes.

Lucid Diagnostics Inc. - Committed Equity Facility

In March 2022, our majority-owned subsidiary, Lucid Diagnostics, entered into a committed equity facility with an affiliate of Cantor Fitzgerald ("Cantor"). Under the terms of the facility, Cantor committed to purchase up to $50 million of Lucid Diagnostics common stock from time to time upon the request of Lucid Diagnostics. While there are distinct differences, the facility is structured similarly to a traditional at-the-market equity facility, insofar as it allows Lucid Diagnostics to raise primary capital on a periodic basis at prices based on the existing market price. Through September 30, 2022, 680,263 shares of common stock of Lucid Diagnostics were issued under this facility for total proceeds of approximately $1.8 million.

Results of Operations

Overview

Revenue

The Company recognized revenue resulting from the delivery of patient EsoGuard test results for which cash collections have occurred or payment was reasonably assured. Additionally, revenue was recognized with respect to the EsoGuard Commercialization Agreement, dated August 1, 2021, between the Lucid Diagnostics Inc. and ResearchDx Inc. ("RDx"), a CLIA certified commercial laboratory service provider. On February 25, 2022, the EsoGuard Commercialization Agreement was terminated upon the execution of an Asset Purchase Agreement between the Company's wholly-owned subsidiary of LucidDx Labs Inc. and RDx.

Cost of revenue

Cost of revenues recognized from the delivery of patient EsoGuard test results includes costs related to EsoCheck device usage, shipment of test collection kits, royalties and the cost of services to process tests and provide results to physicians. We incur expenses for tests in the period in which the activities occur, therefore, gross margin as a percentage of revenue may vary from quarter to quarter due to costs being incurred in one period that relate to revenues recognized in a later period.

We expect that gross margin for our services will continue to fluctuate and be affected by EsoGuard test volume, our operating efficiencies, patient compliance rates, payer mix, the levels of reimbursement, and payment patterns of payers and patients.

The cost of revenue recognized with respect to the revenue recognized under the EsoGuard Commercialization Agreement is inclusive of: a royalty fee incurred under the Amended CWRU License Agreement; employee related costs of employees engaged in the administration to patients of the EsoCheck cell sample collection procedure (principally at the Lucid Test Centers); the EsoCheck devices and EsoGuard mailers (cell sample shipping costs) distributed to medical practitioners locations and the Lucid Test Centers; and Lucid Test Centers operating expenses, including rent expense and supplies.

Sales and marketing expenses

Sales and marketing expenses consist primarily of salaries and related costs for employees engaged in sales and marketing activities, as well as advertising and promotion expenses. We anticipate our sales and marketing expenses will increase in the future, as we anticipate an increase in payroll and related expenses related to the roll-out of our commercial sales and marketing operations as we execute on our business strategy.

General and administrative expenses

General and administrative expenses consist primarily of salaries and related costs for personnel, travel expenses, facility-related costs, professional fees, accounting and legal services, employees involved in third-party payor reimbursement contract negotiations and consultants and expenses associated with obtaining and maintaining patents within our intellectual property portfolio.

We anticipate our general and administrative expenses will increase in the future, as we anticipate an increase in payroll and related expenses related with the growth and expansion of our business operations objectives. We also anticipate continued expenses related to being a public company, including audit, legal, regulatory, and tax-related services associated with maintaining compliance as a public company, insurance premiums and investor relations costs.

Research and development expenses

Research and development expenses are recognized in the period they are incurred and consist principally of internal and external expenses incurred for the research and development of our products, including:

- consulting costs charged to us by various external contract research organizations we contract with to conduct clinical and preclinical studies and engineering design and development;
- salary and benefit costs associated with our chief medical officer and engineering personnel;
- costs associated with regulatory filings;
- patent license fees;
- cost of laboratory supplies and acquiring, developing, and manufacturing preclinical prototypes;
- product design engineering studies; and
- rental expense for facilities maintained solely for research and development purposes.

We plan to incur research and development expenses for the foreseeable future as we continue the development of our existing products as well as new innovations. Our research and development activities, including our clinical trials, are focused principally on obtaining FDA approvals, facilitating insurer reimbursement, encouraging physician adoption and developing product improvements or extending the utility of the lead products in our pipeline, including EsoCheck and EsoGuard and CarpX, along with advancing our Veris Cancer Care Platform and EsoCure and PortIO products.

Other Income and Expense, net

Other income and expense, net, consists principally of changes in fair value of our convertible notes and losses on extinguishment of debt upon repayment of such convertible notes.

Results of Operations - continued

Presentation of Dollar Amounts

All dollar amounts in this Management's Discussion and Analysis of Financial Condition and Results of Operations are presented as dollars in millions, except for per share amounts.

Three months ended September 30, 2022 as compared to three months ended September 30, 2021

Revenue

In the three months ended September 30, 2022, revenue was $0.1 million as compared to $0.2 million in the corresponding period in the prior year. The $0.1 million decrease principally relates to the termination of the EsoGuard Commercialization Agreement with RDx, as the Company transitioned to its own laboratory operations effective February 25, 2022. The decrease was offset by revenue for our EsoGuard Esophageal DNA Test performed in our own CLIA laboratory for the three months ended September 30, 2022.

Cost of revenue

In the three months ended September 30, 2022, cost of revenue was approximately $1.6 million as compared to $0.1 million for the corresponding period in the prior year. The $1.5 million increase principally related to:

- approximately $0.2 million increase in compensation related costs as a result of an increase in headcount;
- approximately $0.4 million increase in EsoCheck and EsoGuard supplies usage costs; and
- approximately $0.9 million increase in laboratory operations costs.

Sales and marketing expenses

In the three months ended September 30, 2022, sales and marketing costs were approximately $4.7 million, compared to $2.3 million for the corresponding period in the prior year. The net increase of $2.4 million was principally related to:

- approximately $2.1 million increase in compensation related costs, including stock based compensation of approximately $0.3 million with respect to restricted stock awards to Lucid Diagnostics and PAVmed employees and non-employees, and an increase in stock options granted corresponding with the increase in headcount; and
- approximately $0.3 million increase in consulting and outside professional services.

General and administrative expenses

In the three months ended September 30, 2022, general and administrative costs were approximately $10.3 million, compared to $6.1 million for the corresponding period in the prior year. The net increase of $4.2 million was principally related to:

- approximately $1.8 million increase in compensation related costs principally as a result of an increase in headcount;
- approximately $0.4 million increase in stock based compensation primarily due to the absence in the current year of stock based compensation expense incurred in the prior year resulting from the acceleration of vesting of stock options granted to former members of the Company's board of directors, partially offset by an increase in stock options granted corresponding with the increase in the number of employees;
- approximately $1.5 million increase in consulting services related to patents, regulatory compliance, legal processes for contract review, transition of public relations and investor relations firms, and public company expenses; and
- approximately $0.5 million increase in general business expenses.

Research and development expenses

In the three months ended September 30, 2022, research and development costs were approximately $6.2 million as compared to $5.3 million for the corresponding period in the prior year. The net increase $0.9 million was principally related to:

- approximately $0.2 million increase in development costs, particularly in clinical trial activities and outside professional and consulting fees with respect to EsoCheck, CarpX, Veris Cancer Care Platform, EsoCure and PortIO; and
- approximately $0.7 million increase in compensation related costs and related to expanded clinical and engineering staff.

Change in fair value of convertible debt

In the three months ended September 30, 2022, the non-cash expense recognized for the change in the fair value of our convertible notes was approximately $0.3 million of income, related to both the April 2022 and September 2022 Senior Convertible Notes. The April 2022 and September 2022 Senior Convertible Notes were initially measured at their issue-date estimated fair value and subsequently remeasured at estimated fair value as of the reporting period date. The Company initially recognized a $0.9 million fair value non-cash expense on the September 2022 Senior Convertible Note issue-date. This initial recognition was more than offset by $1.2 million of decreases in fair value upon remeasurements through September 30, 2022.

Results of Operations - continued

Three months ended September 30, 2022 as compared to three months ended September 30, 2021 *- continued*

Loss on Issue and Offering Costs - Senior Secured Convertible Note

In the three months ended September 30, 2022, in connection with the issue of the September 2022 Senior Convertible Note, we recognized a total of approximately $1.2 million of other expense, inclusive of approximately $1.0 million of lender fee non-cash expense, and approximately $0.2 million of offering costs paid by us.

See our unaudited condensed consolidated financial statements Note 11, *Debt*, for additional information with respect to the September 2022 Senior Convertible Note.

Loss on Debt Extinguishment

In the three months ended September 30, 2022, a debt extinguishment loss in the aggregate of approximately $5.1 million was recognized in connection with our April 2022 Senior Convertible Note as discussed below.

- In August 2022, approximately $5.0 million of principal repayments along with less than $0.1 million of interest expense thereon, were settled through the issuance of 5,013,908 shares of common stock of the Company, with such shares having a fair value of approximately $10.1 million (with such fair value measured as the respective conversion date quoted closing price of the common stock of the Company). The conversions resulted in a debt extinguishment loss of $5.1 million in the three months ended September 30, 2022.

Nine months ended September 30, 2022 as compared to nine months ended September 30, 2021

Revenue

In the nine months ended September 30, 2022, revenue was $0.3 million as compared to $0.2 million in the corresponding period in the prior year. The $0.1 million increase principally relates to revenue for laboratory services rendered for our EsoGuard Esophageal DNA Test performed in our own CLIA laboratory. The increase was partially offset by the termination of the EsoGuard Commercialization Agreement, with RDx as the Company transitioned to its own laboratory operations effective February 25, 2022.

Cost of revenue

In the nine months ended September 30, 2022, cost of revenue was approximately $2.0 million as compared to $0.1 million for the corresponding period in the prior year. The $1.9 million increase principally related to:

- approximately $0.4 million increase in compensation related costs as a result of an increase in headcount;
- approximately $0.6 million increase in EsoCheck and EsoGuard supplies usage costs; and
- approximately $0.9 million increase in laboratory operations costs.

Sales and marketing expenses

In the nine months ended September 30, 2022, sales and marketing costs were approximately $13.6 million, compared to $5.6 million for the corresponding period in the prior year. The net increase of $8.0 million was principally related to:

- approximately $5.5 million increase in compensation related costs principally as a result of an increase in headcount;
- approximately $1.0 million increase in stock based compensation from RSA grants to Lucid and PAVmed employees and non-employees, and an increase in stock options granted corresponding with the increase in the number of employees; and
- approximately $1.5 million increase in consulting and outside professional services, and for EsoCheck and EsoGuard marketing supplies.

General and administrative expenses

In the nine months ended September 30, 2022, general and administrative costs were approximately $31.0 million, compared to $16.3 million for the corresponding period in the prior year. The net increase of $14.7 million was principally related to:

- approximately $4.3 million increase in compensation related costs principally as a result of an increase in headcount;
- approximately $1.0 million increase in stock based compensation from RSA grants to Lucid and PAVmed employees and non-employees, and an increase in stock options granted corresponding with the increase in the number of employees;
- approximately $7.7 million increase in consulting services related to patents, regulatory compliance, legal processes for contract review, transition of public relations and investor relations firms, and public company expenses; and
- approximately $1.7 million increase in general business expenses.

Results of Operations - continued

Nine months ended September 30, 2022 as compared to nine months ended September 30, 2021 *- continued*

Research and development expenses

In the nine months ended September 30, 2022, research and development costs were approximately $18.9 million as compared to $12.9 million for the corresponding period in the prior year. The net increase $6.0 million was principally related to:

- approximately $4.3 million increase in development costs, particularly in clinical trial activities and outside professional and consulting fees with respect to EsoCheck, CarpX, Veris Cancer Care Platform, EsoCure and PortIO; and
- approximately $1.7 million increase in compensation related costs and related to expanded clinical and engineering staff.

Other Income and Expense

Change in fair value of convertible debt

In the nine months ended September 30, 2022, the non-cash expense recognized for the change in the fair value of our convertible notes was approximately $1.7 million, related to both the April 2022 and September 2022 Senior Convertible Notes. The April 2022 and September 2022 Senior Convertible Notes were initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair value as of the reporting period date. The Company initially recognized a $3.5 million fair value non-cash expense on the issue-dates. This initial recognition was partially offset by $1.8 million of decreases in fair value upon remeasurements through September 30, 2022.

In the nine months ended September 30, 2021, the non-cash income (expense) recognized for the change in the fair value of our convertible notes was approximately $1.7 million of other income. The change in the fair value adjustment of the convertible notes is principally related to each of the convertible notes being repaid-in-full during the nine months ended September 30, 2021, as discussed herein below under “Loss from Extinguishment of Debt.”

Loss on Issue and Offering Costs - Senior Secured Convertible Note

In the nine months ended September 30, 2022, in connection with the issue of both the April 2022 and September 2022 Senior Convertible Notes, we recognized a total of approximately $4.3 million of other expense, inclusive of approximately $3.5 million of lender fee non-cash expense, and approximately $0.8 million of offering costs paid by us.

Loss from Extinguishment of Debt

In the nine months ended September 30, 2022, a debt extinguishment loss in the aggregate of approximately $5.1 million was recognized in connection with our April 2022 Senior Convertible Note as discussed below.

- In August 2022, approximately $5.0 million of principal repayments along with less than $0.1 million of interest expense thereon, were settled through the issuance of 5,013,908 shares of common stock of the Company, with such shares having a fair value of approximately $10.1 million (with such fair value measured as the respective conversion date quoted closing price of the common stock of the Company). The conversions resulted in a debt extinguishment loss of $5.1 million in the nine months ended September 30, 2022.

In the prior year nine months ended September 30, 2021, a debt extinguishment loss in the aggregate of approximately $3.7 million was recognized in connection with the (previous) convertible notes, as discussed below.

- On January 5, 2021, the repayment of the remaining face value principal of the November 2019 Senior Convertible Note, along with the payment of interest thereon of approximately $1.0 million, were settled with the issuance of 667,668 shares of our common stock, with a fair value of approximately $1.7 million (with such fair value measured as the respective conversion date quoted closing price of our common stock), resulting in the recognition of a loss from extinguishment of debt of approximately $0.8 million in the nine months ended September 30, 2021; and,

- On January 30, 2021, we paid in cash a $350 partial principal repayment of the Senior Convertible Note dated April 30, 2020 (“April 2020 Senior Convertible Note”); and on March 2, 2021, we made a cash payment of approximately $14.5 million, resulting in the repayment-in-full on such date of both the April 2020 Senior Convertible Note and the Senior Secured Convertible Note dated August 6, 2021, resulting in the recognition of a loss from extinguishment of debt of approximately $3.0 million in the nine months ended September 30, 2021.

See our unaudited condensed consolidated financial statements Note 11, *Debt*, for additional information with respect to the April 2022 Senior Convertible Note.

Liquidity and Capital Resources

Our current operational activities are principally focused on the commercialization of EsoGuard and CarpX, and our development activities are focused on pursuing FDA approval and clearance of other lead products in our product portfolio pipeline. Our ability to generate revenue depends upon successfully advancing the commercialization of EsoGuard and CarpX while also completing the development and the necessary regulatory approvals of its other products and services. There are no assurances, however, we will be able to obtain an adequate level of financial resources required for the long-term commercialization and development of its products and services.

We have financed our operations principally through the public and private issuances of our common stock, preferred stock, common stock purchase warrants, and debt. We are subject to all of the risks and uncertainties typically faced by medical device and diagnostic and medical device companies that devote substantially all of their efforts to the commercialization of their initial product and services and ongoing R&D and clinical trials. We expect to continue to experience recurring losses from operations, and will continue to fund our operations with debt and/or equity financing transactions. Notwithstanding, however, with the cash on-hand as of the date hereof and other debt and equity committed sources of financing, we expect to be able to fund our future operations for one year from the date of the issue of our unaudited condensed consolidated financial statements, as included in this Form 10-Q.

Issue of Shares of Our Common Stock

During the nine months ended September 30, 2022

- We issued 299,999 shares of our common stock for cash proceeds of approximately $0.3 million upon exercise of stock options granted under the PAVmed 2014 Equity Plan, as such equity plan is discussed in Note 12, *Stock-Based Compensation*, of our unaudited condensed consolidated financial statements.
- We issued 385,938 shares of our common stock for proceeds of approximately $0.4 million under the PAVmed Employee Stock Purchase Plan (“ESPP”), as such plan is discussed in Note 12, *Stock-Based Compensation* of our unaudited condensed consolidated financial statements.

Securities Purchase Agreement - March 31, 2022 - Senior Secured Convertible Notes - April 4, 2022 and September 8, 2022

Effective as of March 31, 2022, we entered into the SPA with the Investor, pursuant to which we agreed to sell, and the Investor agreed to purchase an aggregate of $50.0 million face value principal of Senior Secured Convertible Notes. The SPA provided for the sale of the initial Senior Secured Convertible Note with a face value principal of $27.5 million, which closed on April 4, 2022 (referred to as the “April 2022 Senior Convertible Note”). The SPA also provided for sales of additional Senior Secured Convertible Notes in one or more additional closings (upon the satisfaction of certain conditions), with an aggregate face value principal of up to an additional $22.5 million.

The April 2022 Senior Secured Convertible Note has a 7.875% annual stated interest rate, a contractual conversion price of $5.00 per share of the Company’s common stock (subject to standard adjustments in the event of any stock split, stock dividend, stock combination, recapitalization or other similar transaction), and a contractual maturity date of April 4, 2024. The April 2022 Senior Convertible Note may be converted into or otherwise paid in shares of our common stock as described in Note 11, *Debt*.

On September 8, 2022, we completed an additional closing under the SPA, in which we sold to the Investor an additional Senior Secured Convertible Note with a face value principal of $11.25 million (referred to as the “September 2022 Senior Convertible Note”). The September 2022 Senior Secured Convertible Note has a 7.875% annual stated interest rate, a contractual conversion price of $5.00 per share of the Company’s common stock (subject to standard adjustments in the event of any stock split, stock dividend, stock combination, recapitalization or other similar transaction), and a contractual maturity date of September 6, 2024. The September 2022 Senior Convertible Note may be converted into or otherwise paid in shares of our common stock as described in Note 11, *Debt*.

The April 2022 Senior Convertible Note proceeds were $24.4 million after deducting a $2.5 million lender fee and the Company’s offering costs of approximately $0.6 million, inclusive primarily of $0.5 million placement agent fees.

The September 2022 Senior Convertible Note proceeds were $10.0 million after deducting a $1.0 million lender fee and the Company’s total offering costs of approximately $0.2 million, inclusive primarily of placement agent fees.

Liquidity and Capital Resources - continued

Under the Senior Convertible Notes and the SPA, we are subject to certain customary affirmative and negative covenants regarding the incurrence of indebtedness, the existence of liens, the repayment of indebtedness and the making of investments, the payment of cash in respect of dividends, distributions or redemptions, the transfer of assets, the maturity of other indebtedness, and transactions with affiliates, among other customary matters. We also are subject to financial covenants requiring that (i) the amount of our available cash equal or exceed $8.0 million at all times, (ii) the ratio of (a) the outstanding principal amount of the notes issued under the SPA, accrued and unpaid interest thereon and accrued and unpaid late charges to (b) our average market capitalization over the prior ten trading days, not exceed 30% (except that such maximum percentage is 50% for the period from September 8, 2022 through March 5, 2023) (the "Debt to Market Cap Ratio Test"), and (iii) that our market capitalization shall at no time be less than $75 million (the "Market Cap Test" and, together with the Debt to Market Cap Ratio Test, the "Financial Tests"). As of September 30, 2022, the Company was in compliance with the Financial Tests. In addition, the Company presently is in compliance with the Financial Tests.

On August 9, 2022, the Company and the Investor also agreed, in connection with the waiver described in Note 11 above, that the Investor may convert up to $5.0 million of the principal amount of the April 2022 Senior Convertible Note at the then current conversion price as if the date of conversion were an Installment Date, i.e. a price per share of common stock equal to the lower of (i) the fixed conversion price then in effect (currently $5.00) and (ii) 82.5% of the average VWAP of the Company's common stock for each of the two trading days with the lowest VWAP of the Company's common stock during the ten consecutive trading day period ending and including the trading day immediately prior to the applicable conversion date, but in the case of clause (ii), not less than $0.18 per share. As contemplated by such amendment, in August 2022, approximately $5.0 million of principal repayments along with less than $0.1 million of interest expense thereon, were settled through the issuance of 5,103,908 shares of our common stock.

See Note 11, *Debt*, for additional information about the SPA and the Senior Secured Convertible Notes.

Lucid Diagnostics Inc. - Committed Equity Facility

In March 2022, our majority-owned subsidiary, Lucid Diagnostics, entered into a committed equity facility with Cantor. Under the terms of the committed equity facility, Cantor has committed to purchase up to $50 million of Lucid Diagnostics common stock from time to time at the request of Lucid Diagnostics. While there are distinct differences, the facility is structured similarly to a traditional at-the-market equity facility, insofar as it allows Lucid Diagnostics to raise primary equity capital on a periodic basis at prices based on the existing market price. As of September 30, 2022, under the committed equity facility, a total of 680,263 shares of common stock of Lucid Diagnostics were issued for proceeds of approximately $1.8 million.

Critical Accounting Policies and Significant Judgments and Estimates

The discussion and analysis of our (unaudited) financial condition and consolidated results of operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP"). The preparation of these unaudited condensed consolidated financial statements requires us to make estimates and assumptions affecting the reported amounts of assets, liabilities, and equity, along with the disclosure of contingent assets and liabilities at the date of the unaudited condensed consolidated financial statements and the reported amounts of expenses during the corresponding periods. In accordance with U.S. GAAP, we base our estimates on historical experience and on various other assumptions we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. Our critical accounting policies are as disclosed in the Company's annual report on Form 10-K for the year ended December 31, 2021 as filed with the SEC on April 6, 2022, except as otherwise noted in Note 2, *Summary of Significant Accounting Policies and Recent Accounting Standards Updates*, of our unaudited condensed consolidated financial statements included herein in this Form 10-Q.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and our principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2022. Based on such evaluation, our principal executive officer and principal financial officer concluded our disclosure controls and procedures (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) were effective as of such date to provide reasonable assurance the information required to be disclosed by us in the reports we file or submit under the Exchange Act is (i) 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 principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes to Internal Controls Over Financial Reporting

There has been no change in internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during our fiscal quarter ended September 30, 2022 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

Part II - Other Information

Item 1. Legal Proceedings

See Note 9, *Commitment and Contingencies - Legal Proceedings*, of the unaudited condensed consolidated financial statements included in this Quarterly Report, for a description of certain material legal proceedings involving the Company, which description is incorporated herein by reference.

In the ordinary course of our business, particularly as it begins commercialization of its products, the Company may be subject to certain other legal actions and claims, including product liability, consumer, commercial, tax and governmental matters, which may arise from time to time. Except as otherwise noted herein, the Company does not believe it is currently a party to any other pending legal proceedings. Notwithstanding, legal proceedings are subject-to inherent uncertainties, and an unfavorable outcome could include monetary damages, and excessive verdicts can result from litigation, and as such, could result in a material adverse impact on the Company's business, financial position, results of operations, and /or cash flows. Additionally, although the Company has specific insurance for certain potential risks, the Company may in the future incur judgments or enter into settlements of claims which may have a material adverse impact on the Company's business, financial position, results of operations, and /or cash flows.

Item 5. Other Information

None.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth in the "*Exhibit Index*" below.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

PAVmed Inc.

November 14, 2022

By: */s/ Dennis M McGrath*
Dennis M McGrath
President and Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Exhibit No.	Description
2.1	Asset Purchase Agreement, dated as of February 25, 2022, by and among LucidDx Labs Inc., Lucid Diagnostics Inc. and ResearchDx, Inc. (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Lucid on March 3, 2022).
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.†
31.2	Certification of Principal Financial and Accounting Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. †
32.2	Certification of Principal Financial and Accounting Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. †
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

† Filed herewith

Exhibit 31.1

CERTIFICATION BY PRINCIPAL EXECUTIVE OFFICER

I, Lishan Aklog, M.D., certify that:

1 I have reviewed this Quarterly Report on Form 10-Q of PAVmed Inc. and Subsidiaries;

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

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

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

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

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

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

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

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

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

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

Date: November 14, 2022

By: */s/ Lishan Aklog, M.D.*
Lishan Aklog, M.D.,
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION BY PRINCIPAL FINANCIAL OFFICER

I, Dennis M. McGrath, certify that:

1 I have reviewed this Quarterly Report on Form 10-Q of PAVmed Inc. and Subsidiaries;

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

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

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

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

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

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

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

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

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

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

Date: November 14, 2022

By: */s/ Dennis M. McGrath*
Dennis M. McGrath
President & Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of PAVmed Inc. and Subsidiaries (the "Company") for the quarter ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Lishan Aklog, M.D., Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that to his knowledge:

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

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

Date: November 14, 2022

By: */s/ Lishan Aklog, M.D.*
Lishan Aklog, M.D.
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of PAVmed Inc. and Subsidiaries (the "Company") for the quarter ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Dennis M. McGrath, President & Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that to his knowledge:

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

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

Date: November 14, 2022

By: */s/ Dennis M. McGrath*
Dennis M. McGrath
President & Chief Financial Officer
(Principal Financial and Accounting Officer)