

**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, 2019

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
Suite 4600
New York, NY
(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:

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.001 par value per share	The NASDAQ Stock Market LLC
Series Z Warrants, each to purchase one share of Common Stock	The NASDAQ Stock Market LLC
Series W Warrants, each to purchase one share of Common Stock	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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

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

As of November 12, 2019, there were 36,759,128 shares of the registrant's Common Stock, par value \$0.001 per share, outstanding.

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PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)

	September 30, 2019	December 31, 2018
Assets		
Current assets		
Cash	\$ 4,097,520	\$ 8,222,119
Prepaid expenses and other current assets	257,363	238,040
Total current assets	4,354,883	8,460,159
Equipment, net	51,001	36,271
Total assets	4,405,884	8,496,430
Liabilities, Preferred Stock, and Stockholders' Deficit		
Current liabilities		
Accounts payable	1,800,453	1,738,837
Accrued expenses and other current liabilities	540,521	1,330,746
Senior Secured Convertible Note issued December 27, 2018, at fair value - (face value principal of \$4,369,000 and \$7,750,00 as of September 30, 2019 and December 31, 2018, respectively)	4,471,535	7,903,000
Total liabilities	6,812,509	10,972,583
COMMITMENTS AND CONTINGENCIES (NOTE 3)		
Stockholders' Deficit		
Preferred stock, par value \$0.001, 20,000,000 shares authorized; Series B Convertible Preferred Stock, par value \$0.001, 1,135,482 and 1,069,941 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively	2,228,315	2,031,845
Common stock, par value \$0.001; 100,000,000 shares authorized; 36,556,178 and 27,142,979 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively	36,556	27,143
Additional paid-in capital	43,251,674	32,619,282
Accumulated deficit	(47,402,814)	(36,992,911)
Total PAVmed Inc. Stockholders' Deficit	(1,886,269)	(2,314,641)
Noncontrolling interest	(520,356)	(161,512)
Total Stockholders' Deficit	(2,406,625)	(2,476,153)
Total Liabilities and Stockholders' Deficit	\$ 4,405,884	\$ 8,496,430

See accompanying notes to the unaudited condensed consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue	\$ —	\$ —	\$ —	\$ —
General and administrative expense	1,724,265	1,395,980	5,331,130	4,366,438
Research and development expense	1,519,415	1,172,844	4,375,425	2,884,873
Total operating expenses	<u>3,243,680</u>	<u>2,568,824</u>	<u>9,706,555</u>	<u>7,251,311</u>
Loss from operations	(3,243,680)	(2,568,824)	(9,706,555)	(7,251,311)
Other income (expense)				
Interest expense - Senior Secured Note	—	(707,714)	—	(1,708,322)
Change in fair value - Senior Secured Convertible Note	379,229	—	(340,830)	—
Debt extinguishment loss - Senior Secured Convertible Note	(406,858)	—	(666,670)	—
Series A and Series A-1 Exchange Offer - March 15, 2018 - incremental fair value - Series Z Warrants issued-upon-exchange of Series A-1 Warrants	—	—	—	(349,796)
Series W Warrants Exchange Offer - April 5, 2018 - incremental fair value - Series Z Warrants issued-upon-exchange of Series W Warrants	—	—	—	(766,456)
Unit Purchase Options (UPOs) Exchange Offer - August 22, 2018 - incremental fair value - UPO-Z issued-upon-exchange of UPO-W	—	(2,120)	—	(2,120)
Modification - Series Z Warrant Agreement - June 1, 2018	—	—	—	(1,140,995)
Change in fair value - Series A Warrants derivative liability	—	—	—	(96,480)
Change in fair value - Series A Convertible Preferred Stock conversion option derivative liability	—	—	—	64,913
Other income (expense), net	(27,629)	(709,834)	(1,007,500)	(3,999,256)
Loss before provision for income tax	(3,271,309)	(3,278,658)	(10,714,055)	(11,250,567)
Provision for income taxes	—	—	—	—
Net loss - before noncontrolling interest	<u>(3,271,309)</u>	<u>(3,278,658)</u>	<u>(10,714,055)</u>	<u>(11,250,567)</u>
Net loss attributable to noncontrolling interest	<u>186,349</u>	<u>32,431</u>	<u>500,622</u>	<u>113,631</u>
Net loss - attributable to PAVmed Inc.	<u>(3,084,960)</u>	<u>(3,246,227)</u>	<u>(10,213,433)</u>	<u>(11,136,936)</u>
Less: Series B Convertible Preferred Stock dividends	(68,129)	(64,897)	(200,402)	(138,926)
Less: Series A-1 Convertible Preferred Stock dividends	—	—	—	(25,148)
Less: Series A Convertible Preferred Stock dividends	—	—	—	(26,487)
Series A and Series A-1 Exchange Offer - March 15, 2018 - incremental fair value - Series B Convertible Preferred Stock issued-upon-exchange of Series A Convertible Preferred Stock	—	—	—	(726,531)
Series A and Series A-1 Exchange Offer - March 15, 2018 - incremental fair value - Series B Convertible Preferred Stock issued-upon-exchange of Series A-1 Convertible Preferred Stock	—	—	—	199,241
Net loss attributable to PAVmed Inc. common stockholders	\$ (3,153,089)	\$ (3,311,124)	\$ (10,413,835)	\$ (11,854,787)
Net loss per share - attributable to PAVmed Inc. - basic and diluted	\$ (0.10)	\$ (0.12)	\$ (0.35)	\$ (0.53)
Net loss per share - attributable to PAVmed Inc. common stockholders - basic and diluted	\$ (0.10)	\$ (0.12)	\$ (0.36)	\$ (0.57)
Weighted average common shares outstanding - basic and diluted	<u>31,030,929</u>	<u>26,538,632</u>	<u>29,211,694</u>	<u>20,827,519</u>

See accompanying notes to the consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' DEFICIT
for the THREE MONTHS ENDED SEPTEMBER 30, 2019

	PAVmed Inc. Stockholders' Deficit							
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Noncontrolling Interest	Total
	Shares	Amount	Shares	Amount				
Balance at June 30, 2019	1,113,201	\$ 2,161,523	34,139,220	\$ 34,139	\$ 40,518,952	\$ (44,251,062)	\$ (342,727)	\$ (1,879,175)
Issue common stock - upon partial conversions of Senior Secured Convertible Note	—	—	2,334,186	2,334	2,343,856	—	—	2,346,190
Issue common stock - Employee Stock Purchase Plan	—	—	82,772	83	67,353	—	—	67,436
Series B Convertible Preferred Stock Dividends	22,281	66,792	—	—	—	(66,792)	—	—
Stock-based compensation	—	—	—	—	318,266	—	—	318,266
Stock-based compensation - majority-owned subsidiary	—	—	—	—	3,247	—	8,720	11,967
Loss	—	—	—	—	—	(3,084,960)	(186,349)	(3,271,309)
Balance as of September 30, 2019	1,135,482	\$ 2,228,315	36,556,178	\$ 36,556	\$ 43,251,674	\$ (47,402,814)	\$ (520,356)	\$ (2,406,625)

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' DEFICIT
for the NINE MONTHS ENDED SEPTEMBER 30, 2019

	PAVmed Inc. Stockholders' Deficit							
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Noncontrolling Interest	Total
	Shares	Amount	Shares	Amount				
Balance at December 31, 2018	1,069,941	\$ 2,031,845	27,142,979	\$ 27,143	\$ 32,619,282	\$ (36,992,911)	\$ (161,512)	\$ (2,476,153)
Issue common stock - registered offerings, net	—	—	5,480,000	5,480	5,373,422	—	—	5,378,902
Issue common stock - upon partial conversions of Senior Secured Convertible Note	—	—	3,850,427	3,850	4,156,113	—	—	4,159,963
Issue common stock - Employee Stock Purchase Plan	—	—	82,772	83	67,353	—	—	67,436
Series B Convertible Preferred Stock Dividends	65,541	196,470	—	—	—	(196,470)	—	—
Stock-based compensation	—	—	—	—	1,023,952	—	—	1,023,952
Stock-based compensation - majority-owned subsidiary	—	—	—	—	11,552	—	141,778	153,330
Loss	—	—	—	—	—	(10,213,433)	(500,622)	(10,714,055)
Balance as of September 30, 2019	1,135,482	\$ 2,228,315	36,556,178	\$ 36,556	\$ 43,251,674	\$ (47,402,814)	\$ (520,356)	\$ (2,406,625)

See accompanying notes to the consolidated financial statements.

**PAVMED INC.
and SUBSIDIARIES**
CONSOLIDATED STATEMENT OF CHANGES IN
SERIES A CONVERTIBLE PREFERRED STOCK and STOCKHOLDERS' DEFICIT
for the THREE MONTHS ENDED SEPTEMBER 30, 2018

	PAVmed Inc. Stockholders' Deficit							
	Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Noncontrolling Interest	Total
	Shares	Amount	Shares	Amount				
Balance at June 30, 2018	975,568	\$ 1,707,244	26,509,654	\$ 26,510	\$ 31,384,984	\$ (26,524,851)	\$ (72,054)	\$ 6,521,833
Issue common stock - conversion of Series B Convertible Preferred Stock	(33,325)	(58,319)	33,325	33	58,286	—	—	—
Dividends - Series B Convertible Preferred Stock	106,045	318,023	—	—	—	(318,023)	—	—
Dividends - Series A Convertible Preferred Stock	—	—	—	—	—	(7,099)	—	(7,099)
Unit Purchase Options Exchange Offer - August 22, 2018	—	—	—	—	2,120	—	—	2,120
Issue common stock - majority-owned subsidiary	—	—	—	—	—	—	943	943
Stock-based compensation	—	—	—	—	306,171	—	—	306,171
Stock-based compensation - majority-owned subsidiary	—	—	—	—	5,329	—	12,973	18,302
Loss	—	—	—	—	—	(3,246,227)	(32,431)	(3,278,658)
Balance as of September 30, 2018	1,048,288	\$ 1,966,948	26,542,979	\$ 26,543	\$ 31,756,890	\$ (30,096,200)	\$ (90,569)	\$ 3,563,612

See accompanying notes to the consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN
SERIES A CONVERTIBLE PREFERRED STOCK and STOCKHOLDERS' DEFICIT
for the NINE MONTHS ENDED SEPTEMBER 30, 2018

	PAVmed Inc. Stockholders											
	PAVmed Inc. Stockholders' Deficit											Total
	Series A Convertible Preferred Stock		Series A-1 Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Noncontrolling Interest	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance at December 31, 2017	249,667	\$ —	357,259	\$ 1,032,650	—	\$ —	14,551,234	\$ 14,551	\$ 14,012,053	\$ (17,907,611)	\$ —	\$ (2,848,357)
Underwritten public offering of common stock, net of offering cost	—	—	—	—	—	—	2,649,818	2,650	4,272,011	—	—	4,274,661
Equity Subscription Rights Offering, net of offering cost	—	—	—	—	—	—	9,000,000	9,000	9,199,326	—	—	9,208,326
Exercise - common stock purchase warrant, net of offering costs	—	—	—	—	—	—	308,602	309	20,604	—	—	20,913
Exchange Offer - March 15, 2018	(249,667)	—	(357,259)	(1,032,650)	975,568	1,707,244	—	—	1,406,640	(726,531)	—	1,354,703
Exchange Offer - April 5, 2018	—	—	—	—	—	—	—	—	766,456	—	—	766,456
Series Z Warrant Modification	—	—	—	—	—	—	—	—	1,140,995	—	—	1,140,995
Exchange Offer - August 22, 2018	—	—	—	—	—	—	—	—	2,120	—	—	2,120
Issue common stock - conversion of Series B Convertible Preferred Stock	—	—	—	—	(33,325)	(58,319)	33,325	33	58,286	—	—	—
Dividends - Series B Convertible Preferred Stock	—	—	—	—	106,045	318,023	—	—	—	(318,023)	—	—
Dividends - Series A Convertible Preferred Stock	—	—	—	—	—	—	—	—	—	(7,099)	—	(7,099)
Issue of common stock of majority-owned subsidiary	—	—	—	—	—	—	—	—	—	—	1,812	1,812
Stock-based compensation	—	—	—	—	—	—	—	—	869,437	—	—	869,437
Stock-based compensation of majority-owned subsidiary	—	—	—	—	—	—	—	—	8,962	—	21,250	30,212
Net loss	—	—	—	—	—	—	—	—	—	(11,136,936)	(113,631)	(11,250,567)
Balance at September 30, 2018	—	\$ —	—	\$ —	1,048,288	\$ 1,966,948	26,542,979	\$ 26,543	\$ 31,756,890	\$ (30,096,200)	\$ (90,569)	\$ 3,563,612

See accompanying notes to the consolidated financial statements.

PAVMED INC.
and SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities		
Net loss - before noncontrolling interest ("NCI")	\$ (10,714,055)	\$ (11,250,567)
Adjustments to reconcile net loss - before NCI to net cash used in operating activities		
Depreciation expense	10,328	6,244
Stock-based compensation	1,177,282	899,649
Change in fair value - Senior Secured Convertible Note	340,830	—
Debt extinguishment - Senior Secured Convertible Note	666,670	—
Interest expense added to principal - Senior Secured Note	—	194,570
Interest expense accrued - Senior Secured Note	—	201,867
Interest expense - amortization of debt discount - Senior Secured Note	—	1,117,315
Series A and Series A-1 Exchange Offer - March 15, 2018	—	349,796
Series W Warrants Exchange Offer - April 5, 2018	—	766,456
Unit Purchase Options Exchange Offer - August 22, 2018	—	2,120
Modification expense - Series Z Warrant - June 1, 2018	—	1,140,995
Change in fair value - Series A Warrants derivative liability	—	96,480
Change in fair value - Series A Convertible Preferred Stock conversion option derivative liability	—	(64,913)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(19,323)	(31,513)
Accounts payable	61,616	771,537
Accrued expenses and other current liabilities	(790,225)	31,327
Net cash flows used in operating activities	<u>(9,266,877)</u>	<u>(5,768,637)</u>
Cash flows from investing activities		
Purchase of equipment	(25,058)	(23,464)
Net cash flows used in investing activities	<u>(25,058)</u>	<u>(23,464)</u>
Cash flows from financing activities		
Proceeds - issue of common stock - registered offerings	5,480,000	—
Payment - offering costs - registered offerings	(101,098)	—
Proceeds - issue of common stock in an underwritten public offering	—	4,388,099
Payment - offering costs - underwritten public offering	—	(113,438)
Proceeds - issue units - equity subscription rights offering	—	9,437,000
Payment - offering costs - equity subscription rights offering	—	(228,674)
Payment - Senior Secured Convertible Note - bi-monthly non-installment payments - cash	(279,002)	—
Proceeds - issue common stock - Employee Stock Purchase Plan	67,436	—
Proceeds - issue common stock - majority-owned subsidiary	—	1,812
Proceeds - issue of common stock upon exercise of warrants, net	—	20,913
Payment - Series A Convertible Preferred Stock Dividends	—	(7,099)
Net cash flows provided by financing activities	<u>5,167,336</u>	<u>13,498,613</u>
Net (decrease) increase in cash	(4,124,599)	7,706,512
Cash, beginning of period	8,222,119	1,535,022
Cash, end of period	<u>\$ 4,097,520</u>	<u>\$ 9,241,534</u>

See accompanying notes to the consolidated financial statements.

PAVMED INC. AND SUBSIDIARY
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — The Company and Description of the Business

PAVmed Inc. (“PAVmed” or the “Company”) is a highly-differentiated multi-product technology medical device 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 inception on June 26, 2014, 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 operates in one segment as a medical device company.

On May 8, 2018, Lucid Diagnostics Inc., a majority-owned subsidiary of the Company, was incorporated in the State of Delaware, and on May 12, 2018, Lucid Diagnostics Inc. entered into a license agreement with Case Western Reserve University (“CWRU”) with respect to the intellectual property and proprietary technologies referred to as EsoCheck™ and “EsoGuard™”.

To date, the Company has not recognized revenue. The ability to generate revenue depends upon the Company’s ability to successfully complete the development, obtain regulatory approval, and to initiate commercialization of its product candidates. Currently, the Company’s activities are focused principally on obtaining FDA clearance and initializing commercialization of the lead product candidates, including CarpX™, EsoGuard™, EsoCheck™, and PortIO™, along with advancing additional product candidates through their respective research and development phase, including DisappEAR™ and NextFlo™. The Company plans to incur research and development expenses for the foreseeable future from the continued development of its current and future product candidates.

Collectively, PAVmed Inc. and Lucid Diagnostics Inc. have proprietary rights to the trademarks used herein, including, among others, PAVmed™, Lucid Diagnostics™, CalduS™, CarpX™, DisappEAR™, EsoCheck™, EsoGuard™, EsoCheck™ Cell Collection Device™, EsoCheck™ CCD™, EsoCheck™ Technology, NextCath™, NextFlo™, PortIO™, and “Innovating at the Speed of Life”™. Solely as a matter of convenience, trademarks and trade names referred to herein may or may not be accompanied with the requisite marks of “™” or “®”, however, the absence of such marks is not intended to indicate, in any way, either of PAVmed Inc. or Lucid Diagnostics Inc. will not assert, to the fullest extent possible under applicable law, its rights or the rights to such trademarks and trade names.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements 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 Lucid Diagnostics Inc., with the corresponding noncontrolling interest included as a separate component of consolidated stockholders' equity, including the recognition in the consolidated statement of the net loss attributable to the noncontrolling interest based on the minority ownership interest in the Company's majority-owned subsidiary Lucid Diagnostics Inc. and the corresponding noncontrolling interest.

The condensed balance sheet as of December 31, 2018, which has been derived from audited financial statements, and the unaudited condensed consolidated financial statements, have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), and applicable rules and regulations of the United States Securities and Exchange Commission ("SEC") regarding interim financial reporting. As permitted under SEC rules, certain footnotes or other financial information normally required by U.S. GAAP have been condensed or omitted, and accordingly the balance sheet as of December 31, 2018 has been derived from audited consolidated financial statements at such date but does not include all of the information required by U.S. GAAP for complete financial statements. These unaudited condensed consolidated financial statements have been prepared on the same basis as the Company's annual financial statements, and in the opinion of management, include all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the Company's financial information. Certain items have been reclassified to conform to the current period presentation.

The results of operations for the three and nine months ended September 30, 2019 are not necessarily indicative of the results to be expected for the year ending December 31, 2019 or for any other interim period or for any other future periods. The accompanying unaudited condensed consolidated financial statements and related financial information should be read in conjunction with the audited financial statements and related notes thereto as of and for the year ended December 31, 2018 included in the Company's Annual Report on Form 10-K filed with the SEC.

Going Concern

The provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 205-40, *Presentation of Financial Statements - Going Concern* (ASC Topic 205-40) requires management to assess an entity's ability to continue as a going concern within one year of the date of the financial statements are issued. In each reporting period (including interim periods), an entity is required to assess conditions known and reasonably knowable as of the financial statement issuance date to determine whether it is probable an entity will not meet its financial obligations within one year from the financial statement issuance date. Substantial doubt about an entity's ability to continue as a going concern exists when conditions and events, considered in the aggregate, indicate it is probable the entity will be unable to meet its financial obligations as they become due within one year after the date the financial statements are issued.

The Company anticipates incurring operating losses and does not expect to experience positive cash flows from operating activities and may continue to incur operating losses as it completes the development of its products, seeks regulatory approvals and clearances of such products, and begin to commercially market such products. These factors, which have existed since inception, are expected to continue, and raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the accompanying condensed consolidated financial statements are issued.

The Company's ability to fund its operations is dependent upon management's plans, which include raising additional capital, refinance the debt upon maturity, obtaining regulatory approvals for its products currently under development, commercializing and generating revenues from products currently under development, and continuing to control expenses. However, there is no assurance the Company will be successful in these efforts.

The Company's unaudited condensed consolidated financial statements have been prepared on a going concern basis which contemplates the realization of assets and satisfaction of liabilities and commitments in the normal course of business. The unaudited condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities should the Company be unable to continue as a going concern.

Note 2 — Summary of Significant Accounting Policies - continued

Recent Accounting Standards

Adoption of new accounting Standard

In February 2016, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which establishes a right-of-use (“ROU”) model requiring a lessee to recognize a ROU asset and a lease liability for all leases with terms greater than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods with those fiscal years. A modified retrospective transition approach is required for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company adoption of ASC 842 as of January 1, 2019 did not have an effect on the Company’s unaudited condensed consolidated financial position, results of operations, and cash flows.

Recently issued accounting standards, not yet adopted:

In June 2018, the FASB issued its Accounting Standards Update (“ASU”) 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* (“ASU 2018-07”), which, upon the effective date, will result in non-employee stock-based compensation to be within the scope of ASC-718, and will supersede ASC 505-50. A principal change of the new guidance is to eliminate the ASC 505-50 required periodic fair value remeasure (“mark-to-market”) and use of the “contractual term” as an input to the Black-Scholes option pricing model to calculate the estimated fair value of stock options issued to non-employees, in favor of the ASC 718 one-time measurement of the grant date fair value and use of an “expected term” as such valuation input, for non-employee stock-based compensation expense, as is currently done for employee stock-based compensation expense.

The amended ASC-718 non-employee stock-based compensation provisions are effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within such fiscal year, and for all other companies for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than a company’s adoption of ASC Topic 606, *Revenue from Contracts with Customers* (“ASC 606”). With respect to the Company and its majority-owned subsidiary, the amended ASC-718 non-employee stock-based compensation provisions are required to be adopted by no later than January 1, 2020, resulting from the Company’s “JOBS Act EGC Election” as discussed Company’s Annual Report on Form 10-K for the year ended December 31, 2018. Additionally, the Company, under its “JOBS Act EGC Accounting Standards Election”, adopted ASC 606 as of January 1, 2019, which is the required adoption date of ASC 606 for private companies. At this time, the Company and its majority-owned subsidiary continue to apply the guidance of ASC-505-50 with respect to non-employee stock-based compensation, subject to the future adoption date of the amended ASC-718 provisions with respect to non-employee stock-based compensation.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements on fair value measurement. The guidance is effective for annual periods beginning after December 15, 2019 and interim periods within those annual periods, and early adoption is permitted. The Company is evaluating the impact of this guidance on its unaudited condensed consolidated financial statements.

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480), Derivatives and Hedging (Topic 815) - Part I - Accounting for Certain Financial Instruments with Down-Round Features, and Part II - Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. Principally, ASU 2017-11 amendments simplify the accounting for certain financial instruments with down-round features. The amendments require companies to disregard the down-round feature when assessing whether the instrument is indexed to its own stock, for purposes of determining liability or equity classification. Companies that provide earnings per share (EPS) data will adjust their basic EPS calculation for the effect of the down-round feature when triggered (i.e., when the exercise price of the related equity-linked financial instrument is adjusted downward because of the down-round feature) and will also recognize the effect of the trigger within equity. Additionally, ASU 2017-11 also addresses “navigational concerns” within the FASB ASC related to an indefinite deferral available to private companies with mandatorily redeemable financial instruments and certain noncontrolling interests, which has resulted in the existence of significant “pending content” in the ASC. The FASB decided to reclassify the indefinite deferral as a scope exception, which does not have an accounting effect. The guidance of ASU 2017-11 is effective for public business entities, as defined in the ASC Master Glossary, for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and for all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Earlier adoption is permitted for all entities as of the beginning of an interim period for which financial statements (interim or annual) have not been issued or have not been made available for issuance. The Company is evaluating the impact of this guidance on its unaudited condensed consolidated financial statements.

Note 3 — Commitments and Contingencies

Office Leases

The Company's corporate office lease is on a month-to-month basis, with a 5% per annum increase in the monthly lease payment effective February 1 of each year, and the lease agreement may be cancelled with three months written notice. Total rent expense incurred under the corporate office space lease arrangement was \$32,992 and \$98,453 for the three and nine months ended September 30, 2019, respectively and \$31,331 and \$93,675 for the three and nine months ended September 30, 2018, respectively. As of September 30, 2019, the Company's future minimum lease payments for the corporate office lease on a month-to-month basis are estimated to be approximately \$136,000 for the period October 1, 2019 to September 30, 2020.

Subsequent to September 30, 2019, the Company entered into two separate lease arrangements for office space, including a lease agreement for the period October 16, 2019 to September 30, 2020 and a lease agreement for the period November 1, 2019 to April 30, 2020. The minimum lease payments under both lease agreements is an aggregate of approximately \$47,500.

EsoGuard™ Clinical Trials - Agreement with Clinical Research Agreement

In September 2019, the Company, through its majority-owned subsidiary Lucid Diagnostics Inc., entered into an agreement with a clinical research organization ("CRO") in connection with EsoGuard™ clinical trials, referred to as the EsoGuard™ CRO Agreement. The CRO will assist the Company with conducting two concurrent clinical trials referred to as the "EsoGuard™ screening study" and the "EsoGuard™ case control study". The term of the EsoGuard™ CRO Agreement is from the September 2019 effective date to the conclusion of the respective clinical trials, but not to exceed 60 months from the effective date of the EsoGuard™ CRO Agreement. The CRO agreement may be cancelled with sixty days written notice, without an early termination fee. Under the CRO agreement, the Company is required to fund an on-account deposit of \$643,000 with the CRO, with such on-account deposit refundable to the Company. In September 2019, \$200,000 of the on-account deposit was paid and is included in the accompanying condensed consolidated balance sheet as of September 30, 2019 in the line item captioned Prepaid expenses and other current assets. The remaining balance of the on-account deposit is scheduled to be paid in the three months ended December 31, 2019. The Company has recognized as research and development expense approximately \$104,000 in the three and nine months ended September 30, 2019 with respect to the EsoGuard™ CRO Agreement.

Legal Proceedings

In the ordinary course of our business, particularly as we begin commercialization of our 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. 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 4 — Stock-Based Compensation

PAVmed Inc. 2014 Long-Term Incentive Equity Plan

The PAVmed Inc. 2014 Long-Term Incentive Equity Plan (“PAVmed Inc. 2014 Equity Plan”), adopted by the Company’s board of directors and stockholders in November 2014, is designed to enable the Company to offer employees, officers, directors, and consultants, as defined, an opportunity to acquire a proprietary interest in the Company. The PAVmed Inc. 2014 Equity Plan provides for the granting of stock options, stock appreciation rights, restricted stock awards, and other stock-based awards subject to limitations under applicable law. All awards under the PAVmed Inc. 2014 Equity Plan are subject to approval by the compensation committee of the Company’s board of directors.

A total of 7,951,081 shares of common stock of PAVmed Inc. are reserved for issuance under the PAVmed Inc. 2014 Equity Plan, with 2,598,406 shares available for grant as of September 30, 2019, exclusive of 500,854 PAVmed Inc. stock options previously granted outside the PAVmed Inc. 2014 Equity Plan.

PAVmed Inc 2014 Equity Plan - Stock Options

	Number Stock Options	Weighted Average Exercise Price	Aggregate Intrinsic Value	Remaining Contractual Term (Years)
PAVmed Inc. 2014 Equity Plan - Stock Options				
Outstanding stock options at December 31, 2018	3,327,140	\$ 3.68	\$ —	
Granted	1,875,000	\$ 1.00		
Exercised	—	\$ —		
Forfeited	(48,611)	\$ 5.00		
Outstanding stock options at September 30, 2019	5,153,529	\$ 2.70	\$ —	8.4
Vested and exercisable stock options at September 30, 2019	2,942,544	\$ 3.62	\$ —	7.7
Unvested stock options at September 30, 2019	2,210,985	\$ 1.46	\$ —	

The aggregate intrinsic value is computed as the difference between the quoted price of the PAVmed Inc. common stock on each of September 30, 2019 and December 31, 2018 and the exercise price of the underlying PAVmed Inc. stock options, to the extent such quoted price is greater than the exercise price.

During the nine months ended September 30, 2019, an aggregate of 1,875,000 stock options were granted under the PAVmed Inc. 2014 Equity Plan, each with a ten year contractual term from date-of-grant, and vesting ratably on a quarterly basis, generally over a 36 month period.

PAVmed Inc 2014 Equity Plan - Restricted Stock Awards

On March 15, 2019, a total of 700,000 restricted stock awards were granted to employees under the PAVmed Inc. 2014 Equity Plan, representing a corresponding number of shares of common stock of the Company, which vest ratably on an annual basis commencing March 15, 2020 and ending March 15, 2022. The restricted stock awards are subject to forfeiture if the requisite service period is not completed. As of September 30, 2019, no restricted stock awards had vested.

Note 4 — Stock-Based Compensation - continued

PAVmed Inc Employee Stock Purchase Plan

The PAVmed Inc. Employee Stock Purchase Plan (“ESPP”), adopted by the Company’s board of directors effective April 1, 2019, with a reservation of 250,000 shares of PAVmed Inc. common stock, provides eligible employees the opportunity to purchase shares of PAVmed Inc. common stock through payroll deductions during six month periods, wherein the “purchase price per share” is the lower of 85% of the quoted closing price per share of PAVmed Inc. common stock at the beginning or end of each six month share purchase period. The PAVmed Inc. ESPP share purchase dates are March 31 and September 30, with an initial six month payroll deduction period of April 1, 2019 to September 30, 2019. On September 30, 2019, 82,772 shares of PAVmed Inc. common stock were issued for proceeds of \$67,436 under the ESPP.

Lucid Diagnostics Inc. 2018 Long-Term Incentive Equity Plan

The Lucid Diagnostics Inc. 2018 Long-Term Incentive Equity Plan (the “Lucid Diagnostics Inc. 2018 Equity Plan”) became effective on May 12, 2018 and 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 Lucid Diagnostics Inc. 2018 Equity Plan provides for the granting of stock options, stock appreciation rights, restricted stock awards, 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 2,000,000 shares of common stock of Lucid Diagnostics Inc. are reserved for issuance under the Lucid Diagnostics Inc. 2018 Equity Plan, with 1,305,000 shares available for grant as of September 30, 2019, exclusive of 300,000 Lucid Diagnostics Inc. stock options previously granted outside the Lucid Diagnostics Inc. 2018 Equity Plan.

Lucid Diagnostics Inc 2018 Equity Plan - Stock Options

<u>Lucid Diagnostics Inc. 2018 Equity Plan - Stock Options</u>	<u>Number Stock Options</u>	<u>Weighted Average Exercise Price</u>	<u>Remaining Contractual Term (Years)</u>
Outstanding stock options at December 31, 2018	375,000	\$ 0.60	
Granted	620,000	\$ 1.02	
Exercised	—	\$ —	
Forfeited	—	\$ —	
Outstanding stock options at September 30, 2019	995,000	\$ 0.86	9.2
Vested and exercisable stock options at September 30, 2019	441,246	\$ 0.83	9.1
Unvested stock options at September 30, 2019	553,754	\$ 0.88	

During the nine months ended September 30, 2019, an aggregate of 620,000 stock options were granted under the Lucid Diagnostics Inc. 2018 Equity Plan, each having a ten year contractual term from date-of-grant, and vesting ratably on a quarterly basis, generally over a 36 month period, except for a grant with 200,000 stock options vesting immediately upon grant, with the remaining 100,000 stock options vesting ratably on a quarterly basis, over a 35 month period.

Note 4 — Stock-Based Compensation (continued)

Stock-Based Compensation Expense

Consolidated stock-based compensation expense recognized 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, for the periods indicated, was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
General and administrative expenses	\$ 268,859	\$ 247,818	\$ 852,868	\$ 701,174
Research and development expenses	61,374	76,655	324,414	198,475
Total	\$ 330,233	\$ 324,473	\$ 1,177,282	\$ 899,649

The stock-based compensation expense related to stock options granted to employees and directors is based on the grant-date estimated fair value, and for stock options granted to non-employees is based on the vesting date estimated fair value, with the expense recognized on a straight-line basis over the award's requisite service period, which is generally the vesting period.

The consolidated stock-based compensation expense classified in research and development expenses, as presented above, includes such expense recognized by Lucid Diagnostics Inc. with respect to each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Plan, including \$3,247 and \$11,552 in the three and nine months ended September 30, 2019, respectively, and \$5,329 and \$8,962 in the three and nine months ended September 30, 2018, respectively, with respect to stock options granted under the PAVmed Inc. 2014 Equity Plan; and, \$8,720 and 141,778 in the three and nine months ended September 30, 2019, respectively, and \$12,973 and \$21,250 in the three and nine months ended September 30, 2018, respectively, with respect to stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan.

As of September 30, 2019, total unrecognized stock-based compensation expense and weighted average remaining requisite service period under each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc 2018 Equity Plan, is as follows:

	Unrecognized Expense	Remaining Service Period
PAVmed Inc. 2014 Equity Plan		
Stock Options	\$ 1.4 million	1.3 years
Restricted Stock Awards	\$ 0.6 million	2.4 years
Lucid Diagnostics Inc. 2018 Equity Plan		
Stock Options	\$ 0.2 million	2.1 years

Stock-based compensation expense recognized with respect to stock options granted under the PAVmed Inc. 2014 Equity Plan to employees and members of the board of directors was based on a weighted average estimated fair value of such stock options of \$0.92 and \$1.22 per share during the nine months ended September 30, 2019 and 2018, respectively, calculated using the following weighted average Black-Scholes valuation model assumptions:

	Nine Months Ended September 30,	
	2019	2018
Risk free interest rate	2.3%	2.1%
Expected term of stock options (in years)	5.7	5.8
Expected stock price volatility	50%	50%
Expected dividend yield	0%	0%

Stock-based compensation expense recognized with respect to stock options granted under the PAVmed Inc. 2014 Equity Plan to non-employees was based on a weighted average estimated fair value of such stock options of \$1.87 and \$2.07 per share during the nine months ended September 30, 2019 and 2018, respectively, calculated using the following weighted average Black-Scholes valuation model assumptions:

	Nine Months Ended September 30,	
	2019	2018
Risk free interest rate	2.2%	2.7%
Expected term of stock options (in years)	8.6	8.8
Expected stock price volatility	60%	60%
Expected dividend yield	0%	0%

The restricted stock awards granted to employees under the PAVmed Inc. 2014 Equity Plan are measured at their grant date estimated fair value based on the date-of-grant quoted price per share of PAVmed Inc. common stock. The 700,000 restricted stock awards granted on March 15, 2019 had an aggregate fair value of \$742,000, with such stock-based compensation expense recognized ratably over the requisite service period, which is the vesting period, commencing on the March 15, 2019 grant date and ending on the March 15, 2022 final vesting date. The stock-based compensation expense recognized with respect to such restricted stock awards was \$61,833 and \$144,278 in the three and nine months ended September 30, 2019 was, respectively, and is included in the consolidated stock-based compensation expense classified in general and administrative expenses, as presented above. There was no such stock-based compensation expense in the corresponding prior year period.

Note 4 — Stock-Based Compensation - continued*Stock-Based Compensation Expense - continued*

Stock-based compensation expense recognized with respect to stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan to employees was based on a weighted average estimated fair value of such stock options of \$0.32 and \$0.40 per share during the three and nine months ended September 30, 2019 and 2018, respectively, and was calculated using the following weighted average Black-Scholes valuation model assumptions:

	Nine Months Ended September 30, 2019
Risk free interest rate	2.1%
Expected term of stock options (in years)	5.8
Expected stock price volatility	63%
Expected dividend yield	0%

There was no stock-based compensation expense recognized for Lucid Diagnostics Inc. stock options granted to employees in the corresponding prior year period.

Stock-based compensation expense recognized with respect to stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan to non-employees was based on a weighted average estimated fair value of such stock options of \$0.36 and \$0.40 per share during the three and nine months ended September 30, 2019 and 2018, respectively, and was calculated using the following weighted average Black-Scholes valuation model assumptions:

	Nine Months Ended	
	September 30, 2019	September 30, 2018
Risk free interest rate	2.0%	3.0%
Expected term of stock options (in years)	9.0	9.7
Expected stock price volatility	62%	66%
Expected dividend yield	0%	0%

As noted above, the Company uses the Black-Scholes valuation model to estimate the fair value of stock options granted under each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan, which requires the Company to make certain estimates and assumptions, with the weighted-average valuation assumptions for stock-based awards, as follows: weighted-average risk-free interest rate is based on the interest rate payable on U.S. Treasury securities in effect at the time of grant for a period commensurate with the assumed expected option term; expected term of stock options represents the period of time stock options are expected to be outstanding, which for employees is the expected term derived using the simplified method and for non-employees is the contractual term; expected stock price volatility is based on historical stock price volatilities of similar entities within the Company's industry over the period commensurate with the expected term of the stock option; and, expected dividend yield is based on annual dividends of \$0.00 as the Company has not historically paid, and does not expect to pay dividends for the foreseeable future. The PAVmed Inc. quoted closing price per share of common stock is used in the computation of estimated fair value of stock options granted under the PAVmed Inc. 2014 Equity Plan. The price per share common stock of Lucid Diagnostics Inc. used in the computation of estimated fair value of stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan was estimated using a discounted cash flow method applied to a multi-year forecast of future cash flows of Lucid Diagnostics Inc.

Note 5 — Financial Instruments Fair Value Measurements

Recurring Fair Value Measurements

The fair value hierarchy table for the periods indicated 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, 2019				
Senior Secured Convertible Note	\$ —	\$ —	\$ 4,471,535	\$ 4,471,535
Totals	\$ —	\$ —	\$ 4,471,535	\$ 4,471,535
December 31, 2018				
Senior Secured Convertible Note	\$ —	\$ —	\$ 7,903,000	\$ 7,903,000
Totals	\$ —	\$ —	\$ 7,903,000	\$ 7,903,000

(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.

Senior Secured Convertible Note - December 2018

The Senior Secured Convertible Note issued December 27, 2018 estimated fair value and face value principal, and the corresponding changes in estimated fair value and face value principal payable, as of each of the respective dates noted, are as follows:

Senior Secured Convertible Note - Issued December 27, 2018 Nine Months Ended September 30, 2019	Fair Value	Face Value Principal Payable
Balances - December 31, 2018	\$ 7,903,000	\$ 7,750,000
Less: repayment - bi-monthly Installment Amount - common stock	(1,162,500)	(1,162,500)
Less: repayment - Accelerated Installment Amount - common stock	(904,500)	(904,500)
Less: repayment - voluntary conversion price adjustments - common stock	(1,314,000)	(1,314,000)
Less: bi-monthly non-installment payments - cash	(279,002)	—
Less: non-installment payments - common stock	(112,293)	—
Fair value adjustment - nine months ended September 30, 2019	340,830	—
Balances - September 30, 2019	\$ 4,471,535	\$ 4,369,000

Senior Secured Convertible Note - Issued December 27, 2018 December 27, 2018 to December 31, 2018	Fair Value	Face Value Principal Payable
Balances - issue date December 27, 2018	\$ 7,750,000	\$ 7,750,000
Fair value adjustment - December 27, 2018 to December 31, 2018	153,000	—
Balances - December 31, 2018	\$ 7,903,000	\$ 7,750,000

In the nine months ended September 30, 2019, the aggregate face value principal repayments of \$3,381,000 and \$112,293 of corresponding non-installment payments were settled by the issue of a total of 3,850,427 shares of common stock of the Company, and an additional non-installment payments of \$279,002 were cash paid.

The fair value adjustment of \$340,830 as of September 30, 2019 was recognized as a current period expense in the nine months ended September 30, 2019, as no portion of such fair value adjustments resulted from instrument-specific credit risk of the Senior Secured Convertible Note, as of the dates noted.

The estimated fair value as of September 30, 2019 and December 31, 2018 of the Senior Secured Convertible Note was computed using a combination of the present value of the Senior Secured Convertible Note cash flows using a synthetic credit rating analysis' required rate of return and the Black-Scholes option pricing model, using the following assumptions:

Fair Value Assumptions	September 30, 2019	December 31, 2018
Senior Secured Convertible Note - Issued December 27, 2018		
Fair value	\$ 4,471,535	\$ 7,903,000
Face value principal payable	\$ 4,369,000	\$ 7,750,000
Required rate of return	12.3%	13.1%
Conversion price	\$ 1.60	\$ 1.60
Value of common stock	\$ 0.96	\$ 0.96
Expected term (years)	0.9	2.0
Volatility	56%	50%
Risk free rate	1.75%	2.5%
Dividend yield	0%	0%

See Note 6, *Debt*, for further information with respect to the Senior Secured Convertible Note issued December 27, 2018.

Note 6 — Debt

Senior Secured Convertible Note - December 2018

In a private placement transaction with an institutional investor (“Investor”, “Lender”, and /or “Holder”) on December 27, 2018, the Company entered into a Securities Purchase Agreement under which it issued a Senior Secured Convertible Note, having an issue date of December 27, 2018, a contractual maturity date of December 31, 2020, a face value principal of \$7.75 million, and a stated interest rate of 7.875% per annum - referred to herein as the “December 2018 Senior Convertible Note”. At the election of the Holder, the December 2018 Senior Convertible Note may be converted into shares of common stock of the Company, as discussed below.

The December 2018 Senior Convertible Note proceeds were \$7.0 million after payment of \$750,000 of lender fees. The Company incurred total offering costs of \$614,940, inclusive of the payment of a \$455,000 placement agent fee and legal fees, with such offering costs recognized as a current period expense on December 27, 2018.

Bi-Monthly Payments & Conversion

The December 2018 Senior Convertible Note requires bi-monthly payments on the 15th calendar day and the last trading day of the month, commencing January 15, 2019 and ending December 31, 2020, including a contractually stated face value principal repayment, referred to as a bi-monthly Installment Amount, and a payment based on the outstanding face value principal and the 7.875% annual interest rate, referred to herein as a bi-monthly non-installment payment. The bi-monthly payments of January 15, 2019 through June 15, 2019 were non-installment payments only, and the bi-monthly payments from June 28, 2019 through December 31, 2020 include both the Installment Amount and the non-installment payment.

As originally structured, the December 2018 Senior Convertible Note Installment Amount included 35 bi-monthly payments of \$193,750 from June 28, 2019 through November 30, 2020, and two final payments of \$484,375 on each of December 15, 2020 and December 31, 2020, with such bi-monthly dates referred to as Installment Dates. Notwithstanding, future contractual Installment Amounts are reduced by additional face value principal repayments, with the reductions applied in reverse order of maturity of the bi-monthly Installment Amounts, starting with the final December 31, 2020 bi-monthly Installment Amount. In this regard, as of September 30, 2019, the future bi-monthly Installment Amounts have been reduced by an aggregate of \$2,218,500 resulting from conversions in excess of the contractual bi-monthly Installment Amount, including a series of “conversion price voluntary adjustments” and the “Accelerated Installment Amount”, each as discussed below.

At the election of the Holder, at any time after the December 27, 2018 issue date, the December 2018 Senior Convertible Note may be converted into shares of common stock of the Company at an initial contractual conversion price of \$1.60 per share. As amended on April 11, 2019, commencing with the June 28, 2019 bi-monthly payment, the bi-monthly Installment Amount and non-installment payment will be paid by the issue of shares of common stock of the Company, subject to the satisfaction of customary equity conditions, including minimum price and volume thresholds, referred to as an Installment Conversion.

In addition to the bi-monthly Installment Amount, the Holder may elect to accelerate the conversion of future bi-monthly Installment Amounts, and interest thereon, referred to herein as an Acceleration Installment Amount, utilizing the then current conversion price of the most recent bi-monthly Installment Conversion, with such Accelerated Installment Amount subject to certain restrictions, as defined.

The December 2018 Senior Convertible Note provides for a voluntary adjustment of the conversion price at the discretion of the Company, with the consent of the Holder, wherein during the term of the December 2018 Senior Convertible Note, the Company may at any time reduce the then current conversion price to any amount and for any period of time deemed appropriate by the board of directors of the Company. The Company’s board of directors have adopted guidelines surrounding such a December 2018 Senior Convertible Note voluntary adjustment of the conversion price, if any, to be implemented by management when favorable market conditions exist for the Company to orderly and effectively reduce its outstanding debt to the investor. See below for a discussion of the conversion price voluntary adjustments.

Note 6 — Debt - continued

Senior Secured Convertible Note - December 2018 - continued

Measurement and Recognition

The December 2018 Senior Convertible Note is a debt host containing embedded features and /or options generally required to be bifurcated from the debt host and recognized as separate derivatives subject to initial and subsequent periodic estimated fair value measurements under FASB Topic ASC 815, *Derivatives and Hedging* (“ASC 815”). Notwithstanding, the December 2018 Senior Convertible Note is being accounted for under the guidance of the “fair value option” (“FVO”) of FASB ASC Topic 825, *Financial Instruments* (“ASC 825”), including the FVO election provided for under ASC 825-10-15-4. As such, the December 2018 Senior Convertible Note was initially measured at its December 27, 2018 issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date, with changes in estimated fair value recognized as current period income or expense, to the extent such change is not the result of a change in the instrument-specific credit risk of the December 2018 Senior Convertible Note. See Note 5, *Financial Instruments Fair Value Measurements*, for the December 2018 Senior Convertible Note estimated fair value and face value principal and corresponding changes in fair value and face value principal payable.

The December 2018 Senior Convertible Note fair value adjustments resulted in the recognition of income \$379,229 and an expense of \$340,830 in the three and nine months ended September 30, 2019, respectively. As the December 2018 Senior Convertible Note was issued on December 27, 2018, there is no such fair value adjustment recognized in the corresponding prior year periods of three and nine months ended September 30, 2018.

In the three nine months ended September 30, 2019, the aggregate principal repayments of \$1,850,000 and \$3,381,000, respectively, and 89,332 and \$112,293 of corresponding non-installment payments, respectively, were settled by the issue of 2,334,186 and 3,850,427 shares of common stock of the Company, respectively, resulting in a debt extinguishment loss in the three and nine months ended September 30, 2019, of \$406,858 and \$666,670, respectively, summarized as follows:

	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Bi-monthly Installment Amount principal repayments	\$ 968,750	\$ 1,162,500
Accelerated Installment Amount principal repayments	881,250	904,500
Voluntary conversion price adjustments principal repayments	—	1,314,000
Sub-Total: principal repayments	1,850,000	3,381,000
Non-installment payments	89,332	112,293
Total Installment repayments and Non-Installment payments	\$ 1,939,332	\$ 3,493,293
Fair Value - Common Stock Issued	\$ 2,346,190	\$ 4,159,963
Debt Extinguishment Loss	\$ 406,858	\$ 666,670

As noted above, the debt extinguishment loss resulted from the difference between the total of the bi-monthly Installment Amount principal repayments and the Accelerated Amount principal repayments and corresponding non-installment payments, as compared to the fair value of the shares of common stock issued upon such conversions, with the common stock fair value measured as the respective issue date closing quoted price per share of the common stock of the Company.

As provided for in the December 2018 Senior Secured Convertible Note Agreement, the Holder elected to defer the September 30, 2019 bi-monthly Installment Amount, as well as, subsequent to September 30, 2019, the Installment Amount for each of the October 15, 2019 and October 31, 2019 bi-month Installment Dates. Subsequent to September 30, 2019 and through November 12, 2019, total Acceleration Installment Amount face value principal repayments of \$150,000 and the corresponding \$1,641 of non-installment payment, was settled by the issue of 202,950 shares of common stock of the Company with a fair value of \$184,864, with the common stock fair value measured as the respective issue date closing quoted price per share of the common stock of the Company.

Covenants and Other Provisions

Under the December 2018 Senior Convertible Note, the Company is subject to certain customary affirmative and negative covenants regarding the incurrence of indebtedness, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends, distributions or redemptions, and the transfer of assets, and to have an unrestricted cash balance of at least \$1.75 million at each quarterly balance sheet date, among other provisions and covenants.

Senior Secured Note - July 2017

On December 27, 2018, concurrent with the issue of the December 2018 Senior Convertible Note, the Company repaid-in-full the previously issued Senior Secured Note. The Senior Secured Note total interest expense recognized was \$707,714 and \$1,708,322, respectively, in the three and nine months ended September 30, 2018. The total interest expense was comprised of: the Senior Secured Note stated 15% interest expense of \$201,867 and \$591,007, respectively; and debt discount amortization of \$505,847 and \$1,117,315, respectively, for the three and nine months ended September 30, 2018.

Note 7 — Preferred Stock

The Company is authorized to issue 20 million shares of its preferred stock, par value of \$0.001 per share, with such designation, rights, and preferences as may be determined from time-to-time by the Company's board of directors. There were 1,135,482 and 1,069,941 shares of Series B Convertible Preferred Stock (classified in permanent equity) issued and outstanding as of September 30, 2019 and December 31, 2018, respectively.

During the nine months ended September 30, 2019, the Company's board-of-directors have declared Series B Convertible Preferred Stock dividend payments totaling \$196,470 which have been settled by the issue of an additional 65,541 shares of Series B Convertible Preferred Stock, including: dividends earned as of June 30, 2019 and payable July 1, 2019 of \$66,792 settled by the issue of an additional 22,281 shares of Series B Convertible Preferred Stock. Subsequently, in October 2019, the Company's board-of-directors declared a Series B Convertible Preferred Stock dividend payment earned as of September 30, 2019 and payable October 1, 2019 of \$68,129 to be settled by the issue of an additional 22,727 shares of Series B Convertible Preferred Stock. The October 1, 2019 Series B Convertible Preferred Stock dividend payment was not recognized as a dividend payable liability in the accompanying unaudited condensed consolidated balance sheet as the Company's board of directors had not declared such dividends payable as of September 30, 2019.

Note 8 — Stockholders' Equity and Common Stock Purchase Warrants

Common Stock

As of September 30, 2019 the Company is authorized to issue up to 100.0 million shares of common stock, par value of \$0.001 per share. There were 36,556,178 and 27,142,979 shares of common stock issued and outstanding as of September 30, 2019 and December 31, 2018, respectively, summarized as follows:

Shares of Common Stock Issued and Outstanding

Issued and outstanding as of December 31, 2018	27,142,979
Registered offerings	5,480,000
Conversions - Senior Secured Convertible Note issued December 27, 2018	3,850,427
Employee Stock Purchase Plan ("ESPP")	82,772
Issued and outstanding as of September 30, 2019	36,556,178

- A total of 5,480,000 shares of common stock of the Company were issued in registered offerings, including 4,950,000 shares issued under common stock share subscription agreements entered into with individual investors and 530,000 shares issued under a placement agency agreement, resulting in total proceeds of \$5,480,000, before placement agent fees and legal fees of \$101,098.
- A total of 3,850,427 shares of common stock of the Company were issued upon conversions of the December 2018 Senior Secured Convertible Note. See Note 6, *Debt*, for further information with respect to the Senior Secured Convertible Note issued December 27, 2018, including the issue of shares of common stock of the Company.
- A total of 82,772 shares of common stock of the Company were issued under the PAVmed Inc. Employee Stock Purchase Plan ("ESPP"). See Note 4, *Stock-Based Compensation*, for further information with respect to the ESPP.

Subsequent to September 30, 2019, through November 12, 2019, an additional 202,950 shares of common stock of the Company were issued upon conversions of the December 2018 Senior Secured Convertible Note. See Note 6, *Debt*, for further information with respect to the Senior Secured Convertible Note issued December 27, 2018, including the issue of shares of common stock of the Company.

Common Stock Purchase Warrants

The following table summarizes outstanding warrants to purchase common stock of the Company at the dates indicated:

	Common Stock Purchase Warrants Issued and Outstanding at				
	September 30, 2019	Weighted Average Exercise Price /Share	December 31, 2018	Weighted Average Exercise Price	Expiration Date
Equity classified warrants					
Series Z Warrants	16,815,039	\$ 1.60	16,815,039	\$ 1.60	April 2024
UPO - Series Z Warrants	53,000	\$ 1.60	53,000	\$ 1.60	January 2022
Series W Warrants	381,818	\$ 5.00	381,818	\$ 5.00	January 2022
Series S Warrants	1,199,383	\$ 0.01	1,199,383	\$ 0.01	June 2032
Total	18,449,240	\$ 1.57	18,449,240	\$ 1.57	

Note 8 — Stockholders' Equity and Common Stock Purchase Warrants - continued**Noncontrolling Interest**

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

	Nine Months Ended September 30, 2019	Year Ended December 31, 2018
NCI - equity (deficit) - beginning of period	\$ (161,512)	\$ —
Investment in majority-owned subsidiary	—	1,812
Net loss attributable to NCI	(500,622)	(204,072)
Lucid Diagnostics Inc. 2018 Equity Plan - stock-based compensation	141,778	40,748
NCI - equity (deficit) - end of period	<u>\$ (520,356)</u>	<u>\$ (161,512)</u>

The noncontrolling interest presented above is with respect to Lucid Diagnostics Inc., a majority-owned subsidiary of PAVmed Inc., formed in May 2018 in connection with the "CWRU License Agreement". As of September 30, 2019 and December 31, 2018, there were 10.0 million shares of common stock of Lucid Diagnostics Inc. issued and outstanding, of which PAVmed Inc. holds a 81.875% majority-interest ownership and has a controlling financial interest, with the remaining 18.125% minority-interest ownership held by CWRU and each of the three physician inventors of the intellectual property and proprietary technologies underlying the CWRU License Agreement. Accordingly, a provision of a noncontrolling interest (NCI) is included as a separate component of consolidated stockholders' equity, along with the recognition of a net loss attributable to the NCI. In this regard, the daily operations of Lucid Diagnostics Inc. are managed by personnel employed by PAVmed Inc. The costs for such personnel are reimbursed from Lucid Diagnostics Inc. to PAVmed Inc. according to the provisions of a Master Services Agreement ("MSA") between the parties. Lucid Diagnostics Inc. recognized expenses required to be paid to PAVmed Inc. under the MSA of \$600,000 and \$90,000 for the nine months ended September 30, 2019 and 2018, respectively. The pro-rata portion of these expenses related to the minority-interest ownership are included in the net loss attributable to NCI as presented above.

Note 9 —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,	
	2019	2018	2019	2018
Numerator				
Net loss - before noncontrolling interest	\$ (3,271,309)	\$ (3,278,658)	\$ (10,714,055)	\$ (11,250,567)
Net loss attributable to noncontrolling interest	186,349	32,431	500,622	113,631
Net loss - as reported, attributable to PAVmed Inc.	<u>\$ (3,084,960)</u>	<u>\$ (3,246,227)</u>	<u>\$ (10,213,433)</u>	<u>\$ (11,136,936)</u>
Convertible Preferred Stock dividends ⁽¹⁾ :				
Series B	\$ (68,129)	\$ (64,897)	\$ (200,402)	\$ (138,926)
Series A-1	—	—	—	(25,148)
Series A	—	—	—	(26,487)
Series A and Series A-1 Exchange Offer - March 15, 2018 - deemed dividend - incremental fair value - Series B Convertible Preferred Stock issued-upon-exchange of Series A Convertible Preferred Stock				
	—	—	—	(726,531)
Series A and Series A-1 Exchange Offer - March 15, 2018 - Series B Convertible Preferred Stock issued-upon-exchange of Series A-1 Convertible Preferred Stock				
	—	—	—	199,241
Net loss attributable to PAVmed Inc. common stockholders	<u>\$ (3,153,089)</u>	<u>\$ (3,311,124)</u>	<u>\$ (10,413,835)</u>	<u>\$ (11,854,787)</u>
Denominator				
Weighted average common shares outstanding basic and diluted ^{(2) (3)}	<u>31,030,929</u>	<u>26,538,632</u>	<u>29,211,694</u>	<u>20,827,519</u>
Loss per share				
Basic and diluted				
- Net loss - as reported, attributable to PAVmed Inc.	<u>\$ (0.10)</u>	<u>\$ (0.12)</u>	<u>\$ (0.35)</u>	<u>\$ (0.53)</u>
- Net loss attributable to PAVmed Inc. common stockholders	<u>\$ (0.10)</u>	<u>\$ (0.12)</u>	<u>\$ (0.36)</u>	<u>\$ (0.57)</u>

(1)The convertible preferred stock dividends are included in the calculation of basic and diluted net loss attributable to PAVmed Inc. common stockholders for each respective periods presented, including: with respect to the prior year periods, the Series B Convertible Preferred Stock from March 16, 2018 to September 30, 2018, and for each of the Series A-1 and Series A Convertible Preferred Stock from January 1, 2018 to March 15, 2018.

(2)Basic weighted average number of shares of common stock outstanding for the period excludes common stock equivalent incremental shares, while diluted weighted average number of shares outstanding includes such incremental shares. Notwithstanding, 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.

(3)The Series B Convertible Preferred Stock has the right to receive common stock dividends. As such, the Series B Convertible Preferred Stock would potentially been considered participating securities under the two-class method of calculating net loss per share. However, the Company has incurred net losses to-date, and the holders are not contractually obligated to share in the losses.

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

	September 30,	
	2019	2018
Stock Options and Restricted Stock Awards - PAVmed Inc. 2014 Equity Plan	5,853,529	3,277,140
Unit purchase options - “UPO-Z” / “UPO-W” - as to shares of common stock	53,000	53,000
Unit purchase options - “UPO-Z” - as to shares underlying Series Z Warrants	53,000	53,000
Series Z Warrants	16,815,039	16,815,039
Series W Warrants	381,818	381,818
Series S Warrants*	—	1,199,383
Series B Convertible Preferred Stock	1,135,482	1,048,288
Total	<u>24,291,868</u>	<u>22,827,668</u>

* The Series S Warrants were not included in weighted average shares outstanding in the three and nine months ended September 30, 2018 due to certain restrictions on beneficial ownership of the Holder which had not lapsed until January 2019.

Note 10 — Subsequent Events

Senior Secured Convertible Note - November 2019

On November 3, 2019, PAVmed Inc. entered into a Securities Purchase Agreement (“SPA”) with two institutional investors, and pursuant to the SPA, on November 4, 2019 the Company consummated the sale of two series of Senior Secured Convertible Notes in a private placement with a \$14.0 million aggregate face value principal referred to herein as the “November 2019 Senior Convertible Notes”. As discussed below, the November 2019 Senior Convertible Notes were further divided in a Series A and Series B, each with a face value principal of \$7.0 million. The Series A and Series B Senior Convertible Notes were issued with an original issue discount “OID” aggregate total of \$700,000 for each note series. With respect to the Series A Senior Convertible Note, the investors delivered to the Company cash proceeds of \$6.3 million at closing. Additionally, the Company paid an advisory fee of \$409,500 to the placement agent, representing 6.5% of the closing cash proceeds.

The SPA contains certain representations and warranties, covenants, and indemnities customary for similar transactions. The Notes are senior secured obligations of the company secured by a lien on all assets. One of the aforementioned institutional investor is also party to a previous Securities Purchase Agreement with the Company dated December 27, 2018, pursuant to which, among other things the Company issued to the existing investor the Senior Secured Convertible Note issued December 27, 2018 as discussed above in Note 6, *Debt*.

With respect to the Series B Senior Convertible Note, the investors delivered to the Company secured promissory notes with a total principal amount of \$6.3 million, with such promissory notes referred to herein as the “Investor Notes”. Until such time that the Investor Notes are paid in cash to the Company, they will be considered restricted and are prohibited from being converted into common shares of the Company. The Series B Investor Notes are subject to optional prepayment by each investor at any time at the option of the investor, and mandatory prepayment, at the Company’s option, subject to certain equity conditions including, among other conditions, the effectiveness of a resale registration statement. If the respective Series B Investor Notes are each subsequently satisfied by payment in cash, the Company will incur additional financial advisory fees of \$409,500.

A bi-monthly principal repayment and corresponding interest payment will be due commencing March 30, 2020, and then on each of the successive 15th day of the month and the last trading day of the month, and on the maturity date (each, an “Installment Date”). On each bi-monthly Installment Date, the Company will be required to settle a principal repayment totaling \$189,190 for the Series A notes, and to the extent the company has received full cash payment for the Investor Notes, \$189,190 for the Series B notes, together with interest thereon, referred to herein as the “Installment Amount”, which shall be satisfied in shares of common stock of the Company, subject to customary equity conditions (including minimum price and volume thresholds), at 100% of the Installment Amount (an “Installment Conversion”), or otherwise (or at our option, in whole or in part) in cash at 115% of the Installment Amount (an “Installment Redemption”). Generally, an Installment Amount will be automatically deferred to the extent due in respect of restricted principal under the Series B Notes until the corresponding portion of the Investor Note has been prepaid to the Company in cash. Under certain conditions, the Investor or the Company, may offset the Series B notes against the Investor notes.

The Series A Convertible Note and the Series B Convertible Note each have a stated interest rate of 7.875% per annum, except the restricted amounts under each Series B Convertible Note have an interest rate of 3.0% per annum until becoming unrestricted as describe above, then such interest rate is 7.875%.

The Series A Convertible Note and the unrestricted amount of the Series B Convertible Note is convertible, at the option of the noteholder, into shares of common stock of the Company at a conversion price of \$1.60 per share, with such conversion price subject to standard adjustments in the event of any stock split, stock dividend, stock combination, recapitalization or other similar transaction.

Note 10 — Subsequent Events - continued

Solys Diagnostics Inc.

On October 7, 2019, PAVmed Inc. formed Solys Diagnostics Inc. (DE) with authorization to issue 50 million shares of its common stock, par value \$0.001 per share and 20 million shares of its preferred stock, par value \$0.001 per share. Concurrent with its formation, Solys Diagnostics Inc. issued 8.5 million shares of its common stock to PAVmed, Inc. and also immediately acquired a license agreement from Liquid Sensing, Inc., a subsidiary of Airware, Inc., each an unrelated-third-party, in exchange for 1.5 million shares of Solys Diagnostics Inc. common stock issued to Airware, Inc., and 200,000 shares of Solys Diagnostics Inc. common shares issued to a unrelated-third-party consultant. Airware Inc. equity interests have certain anti-dilution rights under limited circumstances and 810,810 shares of Solys Diagnostics Inc. common stock issued to Airware Inc. are subject to certain milestone vesting restrictions. PAVmed Inc. and Airware Inc. have entered into a shareholder's agreement which, among other customary terms, limits certain transfers of their respective ownership interests in Solys Diagnostics Inc.

The exclusive worldwide licensing agreement acquired from Liquid Sensing, Inc. is for its six issued and one pending U.S. patents covering a nondispersive infrared (NDIR) laser proprietary technology for the non-invasive detection of glucose and other substances such as electrolytes in tissue within the inpatient (e.g. hospital) field of use. Pursuant to the licensing agreement, Solys Diagnostics Inc. will immediately advance the technology toward an established accuracy milestone for blood glucose monitoring within the licensed field of use. Upon achievement of the accuracy milestone, it is expected Solys Diagnostics Inc. will then pursue a full regulatory and development plan while also seeking to maximize the value of this proprietary technology with potential strategic partners or acquirers in the blood glucose monitoring market. If commercialized by Solys Diagnostics Inc., Liquid Sensing Inc. has the right to collect future royalties on revenues related to the product developed for commercial use. Liquid Sensing Inc. has granted a 15 percent equity interest in its company to PAVmed, Inc. with a portion of the shares issued being subject to certain performance vesting restrictions.

Other Matters

Except as otherwise noted herein, the Company has evaluated subsequent events through the date of filing of this Quarterly Report on Form 10-Q and determined there to be no further events requiring adjustments to the unaudited condensed unaudited condensed consolidated financial statements and /or disclosures therein.

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, 2018 as filed with 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 its subsidiaries, including its majority-owned subsidiary, Lucid Diagnostics Inc.

Forward-Looking Statements

This Quarterly Report on Form 10-Q, including the following discussion and analyses of our (unaudited) condensed consolidated financial condition and results of operations, contains forward-looking statements.

All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our future results of operations and financial position, our estimates regarding expenses, future revenue, capital and operating expenditure requirements and needs for additional financing, our business strategy and plans and the objectives of management for future operations, and any statement of assumptions underlying or relating to the foregoing, 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.

We may not actually achieve the plans, intentions, and /or expectations disclosed in our forward-looking statements, and you should not rely on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations expressed or implied in the forward-looking statements we make. Factors which may cause such differences include, but are not limited to:

- our limited operating history;
- our financial performance, including our ability to generate revenue;
- our ability to obtain regulatory approval for 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 reliance upon additional financings to fund ongoing operating losses;
- our ability to obtain additional financing;
- our ability to sustain status as a going concern;
- our ability to protect our intellectual property;
- our ability to complete strategic acquisitions;
- our ability to manage growth and integrate acquired operations;
- the liquidity and trading of our securities;
- our regulatory or operational risks;
- our status as an "emerging growth company" under the JOBS Act; and,
- the risks and uncertainties set forth in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2018.

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

You should read this Quarterly Report on Form 10-Q and the Annual Report on Form 10-K for the year ended December 31, 2018, and the documents we have filed as exhibits to this Quarterly Report on Form 10-Q and the Annual Report on Form 10-K for the year ended December 31, 2018, 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.

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

Overview

PAVmed Inc. is a highly differentiated multi-product medical device company organized to advance a broad pipeline of innovative medical technologies we believe address unmet clinical needs and possess attractive market opportunities to commercialization. Since our inception on June 26, 2014, our activities have focused on advancing the lead products in our pipeline towards regulatory approval and commercialization, while protecting our intellectual property, and strengthening our corporate infrastructure and management team. As resources permit, we will continue to explore internal and external innovations meeting our project selection criteria without limiting ourselves to any target specialty or condition.

Our multiple products are in various phases of development and regulatory clearances or approvals. EsoCheck™ has received 510(k) clearance from the FDA to be marketed as a medical device. EsoGuard™ has been established as a Laboratory Developed Test ("LDT"). Our other products in development have not yet received clearance or approval to be marketed or sold in the U.S. or elsewhere. We have been granted patents by the U.S. Patent and Trademark Office ("USPTO") for CarpX™ and PortIO™ and have acquired licenses to certain patents and intellectual property for DisappEAR™ from Tufts University and a group of academic centers, for EsoGuard™ and EsoCheck™ from Case Western Reserve University ("CWRU") and more recently for patents covering infrared technology to non-invasively detect glucose in tissue within the in-patient field of use from Liquid Sensing, Inc. We have begun to promote through various industry periodicals, trade shows, and key opinion leader discussions the upcoming commercial availability to order EsoCheck™ cell collection devices and EsoGuard™ testing kits for later this year. We are continuing to further develop and refine our commercialization strategy in the United States for the balance of our product portfolio and seek commercialization partnerships worldwide. The following is a brief overview of our five lead medical technologies under development, including CarpX™, EsoGuard™ and EsoCheck™, PortIO™, DisappEAR™, and NextFlo™.

With respect to each of PAVmed Inc. and Lucid Diagnostics Inc., we have proprietary rights to the trademarks used herein, including, among others, PAVmed™, Lucid Diagnostics™, Calvus™, CarpX™, DisappEAR™, EsoCheck™, EsoGuard™, EsoCheck™ Technology, EsoGuard™ Technology, NextCath™, NextFlo™, PortIO™, and "Innovating at the Speed of Life"™, among others. Solely as a matter of convenience, trademarks and trade names referred to herein may or may not be accompanied with the requisite marks of "™" or "®". However, the absence of such marks is not intended to indicate, in any way, either of PAVmed Inc. or Lucid Diagnostics Inc. will not assert, to the fullest extent possible under applicable law, its rights or the rights to such trademarks and trade names.

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

Overview - continued

CarpX™

Our CarpX™ product is designed to be a minimally invasive device for the treatment of carpal tunnel syndrome (“CTS”), and which is expected to be reimbursed under existing surgical codes. The Company believes CarpX™ will dramatically reduce recovery times compared to traditional open surgery and will target an estimated immediately addressable market opportunity exceeding \$1 billion with more than 600,000 traditional invasive CTS procedures performed in the United States each year. In addition, an estimated 1.5 million CTS patients continue to suffer in silence rather than undergoing traditional invasive surgery due to concerns over the prolonged recovery time associated with an open incision. CTS is the leading cause of worker’s compensation claims in the United States.

PAVmed has been working closely with the FDA to secure U.S. regulatory clearance of CarpX™ through the FDA’s 510(k) pathway, which is based on demonstrating substantial equivalence, or (“SE”) to a previously cleared predicate device. CarpX™ is being manufactured in Massachusetts by a medical device contract manufacturer with lines scalable to accommodate demand for the foreseeable future following regulatory clearance. We have advanced, in partnership with our design and contract manufacturing partners, our CarpX™ product from concept to working prototypes, completed successful benchtop and cadaver testing confirming the device consistently cuts the transverse carpal ligament, as well as commercial design and development, and performed pre-submission verification and validation testing.

On November 27, 2017, we filed with the Federal Food and Drug Administration, (“FDA”) a premarket notification submission for CarpX™ under section 510(k) of the Food, Drug and Cosmetic Act, or the (“FDCA”) using a commercially available carpal tunnel release device as a predicate. The initial 510(k) application review period expired before the FDA’s branches were able to reach a consensus on SE and it therefore recommended a 510(k) re-submission following an in-person pre-submission meeting held on January 7, 2019. During this meeting, the FDA recommended clinical testing to definitively document CarpX™ procedural safety in humans and indicated data from a properly structured clinical study outside of the U.S. would be acceptable, precluding the need to engage in the FDA’s time-consuming Investigational Device Exemption, (“IDE”) process required for U.S. studies. PAVmed offered to amend its previously planned first-in-human, (“FIH”) clinical trial (ClinicalTrials.gov Identifier: NCT03747510) in New Zealand to meet this clinical testing recommendation and postponed the initiation of the amended study until study parameters were finalized with the FDA. We reached a consensus with the FDA on the parameters of the CarpX™ FIH safety study, including pre- and post-operative electrodiagnostic testing to document device safety. The CarpX™ FIH clinical trial is a single-arm, two-surgeon, 20-patient study of the CarpX™ procedure in carpal tunnel syndrome patients, with a device safety primary endpoint defined as the absence of certain serious device-related adverse events over a limited 90-day follow-up period.

In August 2019, we announced the successful completion of all clinical safety study procedures to support our CarpX™ 510(k) re-submission seeking FDA marketing clearance as a minimally invasive carpal tunnel release device. All of the procedures were performed at St. George’s Hospital in Christchurch, New Zealand, with patients completing preoperative testing in accordance with the study protocol developed in collaboration with the FDA. All 20 patients underwent successful minimally invasive carpal tunnel release using the CarpX™ device and passed the primary effectiveness endpoint of intraoperative confirmation of complete division of the transverse carpal ligament by endoscopic visualization of its cut edges across its entire width. There were no device-related adverse events. As per the study protocol, patients are undergoing post-operative clinical follow-up at two weeks and 90 days. All of the patients who have completed their follow-up have passed the study’s specified primary safety endpoint and, based upon clinical observations, it is expected all of the remaining patients will as well. PAVmed will resubmit the CarpX™ 510(k) application incorporating the clinical safety and effectiveness data from the study after 90-day follow-up is completed in all 20 patients and the data is compiled for submission to the FDA. We will also be preparing to submit CarpX™ for CE Mark clearance in Europe which will incorporate data from the FIH clinical safety study.

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

Overview - continued

EsoCheck™ & EsoGuard™

In May 2018, Lucid Diagnostics Inc., a majority-owned subsidiary of PAVmed Inc., entered into a patent license agreement with Case Western Reserve University (CWRU), for the exclusive worldwide license of the intellectual property rights for two distinct proprietary technologies referred to as EsoCheck™ and EsoGuard™ - referred to herein as the "CWRU License Agreement".

Our EsoGuard™ proprietary technology is intended to detect the primary precursor condition to esophageal cancer, namely Barrett's Esophagus ("BE"), and includes two distinct proprietary technologies, the EsoCheck™ an esophageal cell collection device, and the EsoGuard™ esophageal DNA assay. The EsoGuard™ esophageal DNA assay and the EsoCheck™ cell collection device, which collects cells from a targeted region of the esophagus in a five-minute office-based procedure, are revolutionary proprietary technologies. The EsoCheck™ cell collection device also has promising applications apart from use with the EsoGuard™ assay.

The incidence of esophageal adenocarcinoma ("EAC"), the most common cancer of the esophagus, has quadrupled over the past 30 years. Its prognosis, however, remains dismal, with less than 20% of patients surviving five years. We are pursuing the development of the EsoGuard™ technology to provide the estimated 50 million at-risk patients a non-invasive, less costly test to detect BE to enable treatment of esophageal cancer at an early stage.

The primary cause of the EAC form of esophageal cancer is Gastroesophageal Reflux Disease, ("GERD"), commonly known as chronic heartburn or acid reflux, wherein stomach acid refluxes into the esophagus. GERD affects 20-40% of Western adult populations, according to published epidemiological data. The repeated exposure to stomach acid can lead to pre-cancerous changes in the esophagus lining, a condition known as BE. Nearly all patients diagnosed with EAC have evidence of previously undetected BE. If detected before the EAC esophagus cancer develops, BE can be successfully treated, usually with non-surgical approaches. Heartburn symptoms, commonly seen in patients with acid reflux with or without BE, can easily be treated with over-the counter medications, while endoscopy, the current standard-of-care diagnostic test, is expensive, invasive, and requires sedation. As a result, widespread screening for BE is not currently practical or cost-effective.

EsoGuard™ technology is progressing through a two-phase regulatory and commercialization strategy which seeks to maximize the long-term commercial opportunity while providing near-term commercial milestones.

EsoGuard™ is a methylated DNA biomarker diagnostic test which has been shown in a published human study to be highly accurate at detecting BE, a precursor to highly lethal esophageal cancer in patients with GERD. We believe the EsoGuard™ diagnostic test, when performed on samples collected by EsoCheck™, has the potential to save many lives through early BE detection. The estimated immediately addressable domestic market opportunity for EsoGuard™ is at least \$2 billion based on tens of millions of U.S. GERD patients who are BE screening candidates according to published guidelines.

The EsoGuard™ LDT validation process has been completed at the central reference laboratory in Cleveland, OH. As part of our commercialization strategy, we established a strategic contractual relationship with ResearchDx, based in Irvine, CA. ResearchDx is a state-of-the-art, highly automated contract diagnostic organization certified pursuant to federal Clinical Laboratory Improvement Amendments ("CLIA") requirements to support the marketing of the EsoGuard™ LDT. We currently expect ResearchDx will have the capacity to process and report on the volume of expected patient samples using EsoGuard™ for the foreseeable future. ResearchDx is also manufacturing the custom EsoGuard™ specimen collection kits and will be performing the assay for the clinical trial.

The process to secure Medicare and subsequently private payor reimbursement for the EsoGuard™ LDT is progressing steadily. At the end of March, Lucid Diagnostics Inc. submitted EsoGuard™ to the American Medical Association ("AMA") as the first step in the Proprietary Laboratory Analysis ("PLA") process to secure a diagnostic Current Procedural Terminology ("CPT") billing code and subsequently cleared additional hurdles, including technical advisory review, the CPT Editorial Review Panel, and the Center for Medicare and Medicaid Services ("CMS") Clinical Laboratory Fee Schedule ("CLFS") Annual Public Meeting in late June where proposed payment methodology and amounts were presented. The AMA assigned EsoGuard™ PLA code 0114U "Gastroenterology (Barrett's Esophagus), VIM and CCNA1 methylation analysis, esophageal cells, algorithm reported as likelihood for Barrett's Esophagus" effective October 1, 2019.

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

Overview - continued

EsoCheck™ & EsoGuard™ - continued

At the CLFS public meeting in late June 2019, we recommended CMS initially price 0114U via crosswalk to the CPT code for Genomic Health's Oncotype Dx assay (81519), which is currently paid at \$3,873. At the July 2019 CDLT advisory panel meeting, however, a majority of the panel recommended gap-fill for 0114U. Gap-fill is a process through which the individual Medicare administrative contractors establish initial first year ("Year 1") payment amounts for new codes based on charges for the test, discounts to the charges, resources required to run the test, payment rates established by other payers for the test, and charges, payment amounts, and resources required for other tests may be comparable or otherwise relevant. Then, in year two, CMS pays for the test at the median of the contractor determined amounts. In September 2019, CMS issued a preliminary payment determination for 0114U recommending gap-fill. CMS will accept public comments on the preliminary determination and issue a final determination by the end of 2019. The Company expects to have further discussion with CMS before a gap-fill or crosswalk methodology is finalized to establish the initial payment rate for EsoGuard™ LDT.

In June 2019, we received 510(k) marketing clearance for the EsoCheck™ Cell Collection Device™ from the FDA, which determined EsoCheck™ is substantially equivalent to legally marketed predicate devices for its indications for use, namely "the collection and retrieval of surface cells of the esophagus in the general population of adults, 22 years of age or older". Since EsoCheck™ is FDA-cleared as a generic esophageal cell collection device, through Lucid Diagnostics Inc., we are pursuing other market opportunities in prevalent esophageal conditions other than BE.

Eosinophilic Esophagitis ("EoE") is a common inflammatory condition of the esophagus whose incidence has grown dramatically in the past two decades and frequently coexists with inflammatory bowel disease ("IBD"). EoE patients currently undergo multiple invasive endoscopies to monitor response to treatment. Lucid Diagnostics Inc. will be sponsoring a University of Pennsylvania pilot study to determine whether EsoCheck™ can replace endoscopy in the surveillance of EoE patients, which may have a dramatic clinical and economic impact on the disease. Also, patients with compromised immune systems, such as bone marrow transplant and HIV patients, often undergo endoscopy to evaluate swallowing difficulties to rule out fungal or viral infectious esophagitis. Lucid Diagnostics Inc. is engaged with physicians caring for these patients to determine whether these conditions can be diagnosed with EsoCheck™ instead of endoscopy.

The long-term strategy of Lucid Diagnostics Inc. is to secure a specific indication, based on published guidelines, for widespread BE screening using EsoGuard™ on samples collected with EsoCheck™. This requires having the EsoGuard™ system cleared by the FDA as an In-Vitro Diagnostic ("IVD") device, a process which is progressing at an accelerated pace in close collaboration with its medical and regulatory advisors, including the former director of the FDA's IVD office. An FDA meeting to discuss a Lucid Diagnostics Inc. sponsored, two-arm clinical study to be performed in support of this indication and the clinical data requirements to support a future or Pre-Market Approval ("PMA") pathway submission was conducted on October 9, 2019. Consequently, we have begun contracting with a multinational clinical research organization ("CRO") to establish the outsourced infrastructure to begin enrolling patients later this year or very early in 2020. The screening arm of this study will enroll GERD patients without a prior diagnosis of BE who satisfy the American College of Gastroenterology ("ACG") guidelines for BE screening. The case control arm will enroll patients with a previous diagnosis of non-dysplastic BE, dysplastic BE or EAC. In both arms, EsoGuard™ and EsoCheck™ will be compared to the deemed gold standard of endoscopy with biopsies.

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

Overview - continued

PortIO™

Our PortIO™ implantable intraosseous vascular access device is being developed for up to seven days of continuous use. The intraosseous route, which is well established, provides a means for infusing fluids, medications and other substances directly into the bone marrow cavity which communicates with the central venous circulation via nutrient and emissary veins.

We have advanced, in partnership with our design and contract manufacturing partners, our PortIO™ product from concept to working prototypes, benchtop, animal, and cadaver testing, commercial design and development, verification and validation testing. We are pursuing an FDA clearance for use in patients with a need for vascular access up to seven days, under *de novo* classification of section 513(f)2 of the FDCA. The broader "seven days" 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. The good laboratory practice ("GLP") animal study requested by the FDA has been completed along with supplementary cadaver and animal studies. This data has been submitted to the FDA as part of a pre-submission filing and meeting request to define a likely small human clinical safety study through the *de novo* pathway. Based on encouraging animal data, we are planning a long-term (60-day implant duration) FIH clinical study in dialysis patients or those with poor venous access in Colombia, South America and intend to fulfill the likely FDA request for human clinical data with an "outside-of-United States" ("OUS") clinical safety study in Auckland, New Zealand. CE Mark submission is also being planned and we continue to explore potential strategic partnerships including acquisition of PortIO™. Of significance toward our belief of PortIO™ will one day become the answer to solve many of the current drawbacks intravenous access devices regularly encounter, our supplemental animal testing has demonstrated maintenance-free patency over a six-month implant duration.

DisappEAR™

Our DisappEAR™ product is a resorbable pediatric ear tube based on a proprietary aqueous silk technology.

We have advanced the development of our DisappEAR™ product in partnership with our design and contract manufacturing partners and our academic partners at Tufts University and Harvard Medical School. A three-month animal study of the DisappEAR™ resorbable pediatric ear tube has been completed with excellent results. The resorbable ear tubes, machined from blocks of a proprietary silk technology, performed very well from a functional and anatomic point of view, retaining their position and remaining patent for the duration of the study. In addition, the ear tubes demonstrated unexpected surfactant properties which appear to provide several unique benefits over traditional plastic tubes, including enhanced flow of fluids in and out of the tube and potential intrinsic antimicrobial properties. Finally, there were no cases of otorrhea, which is a difficult to manage condition where pus and fluid drains out of the middle ear and into the ear canal. When traditional plastic ear tubes are used in clinical practice, as well as in this animal model, otorrhea typically occurs in at least 25-30% of recipients, despite administration of antibiotic ear drops. Additional animals are being followed for longer durations to confirm device stability and corroborate the low incidence of otorrhea. In-vitro antimicrobial testing is also being performed to determine whether the surface properties have antimicrobial properties without the need for antibiotic coating and a six-month GLP animal study is being conducted.

NextFlo™

Our NextFlo product is being developed as a highly accurate intravenous infusion system with a new concept of variable flow resistors, whereby the variable resistor does not have to be mechanically linked to the infusion drive mechanism. We believe this technology will permit hospitals to return to gravity-driven infusions and eliminate expensive and troublesome electronic pumps for most of the over one million hospital infusions performed in the U.S. each day.

The NextFlo disposable intravenous ("IV") infusion set has achieved a key milestone in its quest to eliminate the need for complex and expensive electronic infusion pumps for most of the estimated one million infusions of fluids, medications and other substances delivered each day in hospitals and outpatient settings in the United States. NextFlo is designed to deliver highly accurate gravity-driven infusions independent of the height of the IV bag. It maintains constant flow by incorporating a proprietary, passive, pressure-dependent variable flow-resistor consisting entirely of inexpensive, easy-to-manufacture disposable mechanical parts. NextFlo testing has demonstrated constant flow rates across a wide range of IV bag heights, with accuracy rates comparable to electronic infusion pumps. We are conducting a formal M&A process for NextFlo led by the global professional services firm Alvarez & Marsal which is targeting likely potential strategic partners or acquirers.

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

Overview - continued

Other Products

Although we have focused the majority of our resources on our lead products, we have additional products in our pipeline which are currently in different stages of development. We have completed initial design work on the first product in the NextCath™ product line, completed head-to-head testing of retention forces, comparing our working prototype to several competing products, which has validated our approach and advanced the commercial design and development process focusing on optimizing the self-anchoring helical portion as well as cost of materials and manufacturing processes.

We are evaluating which initial applications for our Caldus™ disposable tissue ablation technology to pursue from a clinical and commercial point-of-view and will reinitiate development activity on this product once resources are available.

We are evaluating a number of product opportunities and intellectual property covering a spectrum of clinical conditions, which have been presented to us by clinician innovators and academic medical centers, for consideration of a partnership to develop and commercialize these products. We are also exploring opportunities to partner with larger medical device companies to commercialize our lead products as they move towards regulatory clearance and commercialization. In this regard, we remain actively engaged with our full-service regulatory consulting partner and who is working closely with our contract design, engineering and manufacturing partners as our products advance towards regulatory submission, clearance, and commercialization.

We are exploring other opportunities to grow our business and enhance shareholder value through the acquisition of pre-commercial or commercial stage products and /or companies with potential strategic corporate and commercial synergies consistent with our growth strategy.

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

Overview - continued

Recent Developments

Regulatory

In June 2019, Lucid Diagnostics Inc., a majority-owned subsidiary of PAVmed Inc., received 510(k) marketing clearance for the EsoCheck™ Cell Collection Device™ from the FDA, which determined EsoCheck™ is substantially equivalent to legally marketed predicate devices for its indications for use, namely “the collection and retrieval of surface cells of the esophagus in the general population of adults, 22 years of age or older”.

Clinical Trial

In August 2019, we announced the successful completion of all clinical safety study procedures to support our CarpX™ 510(k) re-submission seeking FDA marketing clearance as a minimally invasive carpal tunnel release device. All of the procedures were performed at St. George's Hospital in Christchurch, New Zealand, with patients completing preoperative testing in accordance with the study protocol developed in collaboration with the FDA. All 20 patients underwent successful minimally invasive carpal tunnel release using the CarpX™ device and passed the primary effectiveness endpoint of intraoperative confirmation of complete division of the transverse carpal ligament by endoscopic visualization of its cut edges across its entire width. There were no device-related adverse events. As per the study protocol, patients are undergoing post-operative clinical follow-up at two weeks and 90 days. All of the patients who have completed their follow-up have passed the study's specified primary safety endpoint and, based upon clinical observations, it is expected all of the remaining patients will as well. We will resubmit the CarpX™ 510(k) application incorporating the clinical safety and effectiveness data from the study after 90-day follow-up is completed in all 20 patients and the data is compiled for submission to the FDA. We will also be preparing to submit CarpX™ for CE Mark clearance in Europe which will incorporate data from the FIH clinical safety study.

In September 2019, we contracted with a multinational CRO organization to begin to establish the outsourced infrastructure for our EsoGuard™ IVD clinical trial in pursuit of our long-term strategy to secure a specific indication for widespread BE screening using EsoGuard™ on samples collected with EsoCheck™. We expect to begin enrolling patients later this year or very early in 2020. Currently, we will market EsoCheck™ as a cell collection device separately from EsoGuard™, a LDT molecular diagnostic test for the detection of BE. A future FDA approval of EsoGuard™ as an IVD will allow us to market together both EsoCheck™ and EsoGuard™.

Solys Diagnostics Inc.

On October 7, 2019, PAVmed Inc. formed Solys Diagnostics Inc. (DE) with authorization to issue 50 million shares of its common stock, par value \$0.001 per share and 20 million shares of its preferred stock, par value \$0.001 per share. Concurrent with its formation, Solys Diagnostics Inc. issued 8.5 million shares of its common stock to PAVmed, Inc. and also immediately acquired a license agreement from Liquid Sensing, Inc., a subsidiary of Airware, Inc., each an unrelated-third-party, in exchange for 1.5 million shares of Solys Diagnostics Inc. common stock issued to Airware, Inc., and 200,000 shares of Solys Diagnostics Inc. common shares issued to an unrelated-third-party consultant. Airware Inc. equity interests have certain anti-dilution rights under limited circumstances and 810,810 shares of Solys Diagnostics Inc. common stock issued to Airware Inc. are subject to certain milestone vesting restrictions. PAVmed Inc. and Airware Inc. have entered into a shareholder's agreement which, among other customary terms, limits certain transfers of their respective ownership interests in Solys Diagnostics Inc.

The exclusive worldwide licensing agreement acquired from Liquid Sensing, Inc. is for its six issued and one pending U.S. patents covering a nondispersive infrared (NDIR) laser proprietary technology for the non-invasively detection of glucose and other substances such as electrolytes in tissue within the inpatient (e.g. hospital) field of use. Pursuant to the licensing agreement, Solys Diagnostics Inc. will immediately advance the technology toward an established accuracy milestone for blood glucose monitoring within the licensed field of use. Upon achievement of the accuracy milestone, it is expected Solys Diagnostics Inc. will then pursue a full regulatory and development plan while also seeking to maximize the value of this proprietary technology with potential strategic partners or acquirers in the blood glucose monitoring market. If commercialized by Solys Diagnostics Inc., Liquid Sensing Inc. has the right to collect future royalties on revenues related to the product developed for commercial use. Liquid Sensing Inc. has granted a 15 percent equity interest in its company to PAVmed, Inc. with a portion of the shares issued being subject to certain performance vesting restrictions.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued

Overview - continued

Recent Developments - continued

Financing

Senior Secured Convertible Note - November 2019

As more fully described in our accompanying unaudited condensed consolidated financial statements Note 10, *Subsequent Events*, on November 3, 2019, PAVmed Inc. entered into a Securities Purchase Agreement (“SPA”) with two institutional investors, and pursuant to the SPA, on November 4, 2019 the Company consummated the sale of two series of Senior Secured Convertible Notes in a private placement with a \$14.0 million aggregate face value principal referred to herein as the “November 2019 Senior Convertible Notes”. The November 2019 Senior Convertible Notes were further divided in a Series A and Series B, each with an aggregate face value principal of \$7.0 million inclusive of “OID” of \$700,000.

In exchange for the Series A notes, the Company received \$6.3 million cash proceeds at closing before payment of a related financial advisory fee of \$409,500. Additionally, in exchange for the Series B notes, the Company received secured promissory Investor Notes in the aggregate amount of \$6.3 million. Until such time that the Investor Notes are paid in cash to the Company, they will be considered restricted and are prohibited from being converted into common shares of the Company. The Series B Investor Notes are subject to optional prepayment by each investor at any time at the option of the investor, and mandatory prepayment, at the Company’s option, subject to certain equity conditions including, among other conditions, the effectiveness of a resale registration statement. Under certain conditions, the Investor or the Company, may offset the Series B notes against the Investor notes. If the respective Series B Investor Notes are each subsequently satisfied by payment in cash, the Company will incur additional financial advisory fees of \$409,500.

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

Overview - continued

Recent Developments - continued

Financing - continued

Issue of Common Stock - Registered Offerings

As further discussed below under the section captioned *Liquidity and Capital Resources*, as of the nine months ended September 30, 2019, we have raised approximately \$5.5 million before fees and expenses of approximately \$0.1 million from the issue of shares of our common stock in registered offerings.

Issue of Common Stock - Conversions - Senior Secured Convertible Note - Issued December 27, 2018

We issued a Senior Secured Convertible Note with an issue date of December 27, 2018, face value principal of \$7.75 million, a stated interest rate of 7.875% per annum, and a contractual maturity date of December 31, 2020 - referred to as the "December 2018 Senior Convertible Note". At the election of the Holder, the December 2018 Senior Convertible Note may be converted into shares of our common stock. As of September 30, 2019, the December 2018 Senior Convertible Note face value principal was approximately \$4.4 million, as result of approximately \$3.4 million face value principal repayments, as discussed below.

In the nine months ended September 30, 2019, aggregate face value principal repayments of \$3,381,000 and \$112,293 of corresponding non-installment payments were settled by the issue of a total of 3,850,427 shares of our common stock, and an additional non-installment payments of \$279,002 were cash paid. In this regard, in the three and nine months ended September 30, 2019, we recognized a debt extinguishment loss of \$406,858 and \$666,670, respectively, resulting from the difference between the face value principal repayments and corresponding non-installment payments noted above, as compared to the fair value of the shares of our common stock issued upon conversion, with the common stock fair value measured as the respective issue date closing quoted price per share of our common stock.

As provided for in the December 2018 Senior Secured Convertible Note, the Holder elected to defer the September 30, 2019 bi-monthly Installment Amount, as well as, subsequent to September 30, 2019, the Installment Amount for each of the October 15, 2019 and October 31, 2019 bi-month Installment Dates. Subsequent to September 30, 2019 and through November 12, 2019, total Acceleration Installment Amount face value principal repayments of \$150,000 and the corresponding \$1,641 of non-installment payment, was settled by the issue of 202,950 shares of our common stock with a fair value of \$184,684, with the common stock fair value measured as the respective issue date closing quoted price per share of our common stock.

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

Financial Results of Operations

Revenue

To date, we have not generated any revenues from product sales. Our ability to generate product revenue and become profitable depends upon our ability to successfully complete the development and initiate the commercialization of our products.

General and administrative expenses

General and administrative expenses consist primarily of salaries and related costs for personnel, including travel expenses for our employees in executive and research and development functions, facility-related costs, professional fees, accounting and legal services, 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 to our preparation and roll-out of our commercial sales and marketing operations. 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, director and officer 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 preclinical studies and engineering studies;
- salary and benefit costs associated with our chief medical officer;
- 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 products. Our current research and development activities are focused principally on obtaining FDA clearance and initializing commercialization of the lead products in our pipeline, CarpX™, EsoCheck™, and EsoGuard™, along with advancing our DisappEAR™ and NextFlo™ products through their respective development phase, with research and development activities on our other portfolio products commensurate with available capital resources. These planned research and development activities include the following:

- completion of engineering design studies for our products;
- finalization of engineering designs and documentation supporting our products;
- additional engineering and preclinical studies through our contract research partners;
- preparation and filing of regulatory submissions with the FDA for our products; and
- establishing and documenting manufacturing processes for our products.

The successful development of our products is uncertain and subject to numerous risks including, but not limited to:

- the scope, rate of progress and expense of our research and development activities;
- the scope, terms and timing of obtaining regulatory clearances;
- the expense of filing, prosecuting, defending and enforcing patent claims;
- the continued access to expertise through outsourced suppliers for engineering and manufacturing; and
- the cost, timing and our ability to manufacture sufficient prototype and commercial supplies for our products.

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

Financial Results of Operations - continued

	Three Months Ended	
	September 30,	
	2019	2018
Revenue	\$ —	\$ —
Operating expense		
General and administrative expense	1,724,265	1,395,980
Research and development expense	1,519,415	1,172,844
Total operating expense	3,243,680	2,568,824
Loss from operations	(3,243,680)	(2,568,824)
Other income (expense)		
Interest expense - Senior Secured Note	—	(707,714)
Change in fair value - Senior Secured Convertible Note	379,229	—
Debt extinguishment loss - Senior Secured Convertible Note	(406,858)	—
Series W Warrants Exchange Offer - April 5, 2018	—	—
Modification - Series Z Warrant Agreement - June 1, 2018	—	—
Unit Purchase Options (UPOs) Exchange Offer – August 22, 2018	—	(2,120)
Other income (expense), net	(27,629)	(709,834)
Loss before income tax	(3,271,309)	(3,278,658)
Provision for income taxes	—	—
Net loss - before noncontrolling interest	(3,271,309)	(3,278,658)
Net loss attributable to noncontrolling interest	186,349	32,431
Net loss - attributable to PAVmed Inc.	(3,084,960)	(3,246,227)
Less: Series B Convertible Preferred Stock dividends	(66,792)	(64,897)
Net loss attributable to PAVmed Inc. common stockholders	\$ (3,151,752)	\$ (3,311,124)

Revenue

As discussed above, to date, we have not generated any revenues from product sales. Our ability to generate product revenue and become profitable depends upon our ability to successfully complete the development and initiate the commercialization of our products.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations- continued**Financial Results of Operations - continued***Comparison of the Three Months Ended September 30, 2019 and 2018- continued**General and Administrative Expense*

	Three Months Ended September 30,			
	2019	2018	\$ Change	%Change
Compensation and related personnel costs	\$ 420,810	\$ 420,771	\$ 39	—%
Stock-based compensation	268,859	247,818	21,041	8%
Outside professional services	677,855	502,317	175,538	35%
Facility related costs	94,310	38,183	56,127	147%
Board related costs	74,375	61,667	12,708	21%
Other operating costs	188,056	125,224	62,832	50%
Total general and administrative expense	\$ 1,724,265	\$ 1,395,980	\$ 328,285	24%

General and administrative expenses incurred in the three months ended September 30, 2019 of \$1,724,265 was an increase of \$328,285 as compared to \$1,395,980 incurred in the corresponding prior year period. The increased general and administrative expenses for the current year period is principally due to increased expenses related to \$175,538 in outside professional services, \$56,127 in facility costs, and \$62,832 in other operating costs.

The stock-based compensation expense classified as general and administrative expense includes such expense recognized with respect to stock options granted to both employees and non-employees and restricted stock awards granted to employees under the PAVmed Inc. 2014 Long-Term Incentive Equity Plan ("PAVmed Inc. 2014 Equity Plan"). The stock-based compensation expense classified as general and administrative expense of \$268,859 incurred during the three months ended September 30, 2019 increased by \$21,041 as compared to the corresponding prior year period, principally resulting from stock options granted after September 30, 2018, along with additional stock options and restricted stock awards granted in 2019, resulting in the recognition of stock based expense in the current period for which there is no such expense in the corresponding prior year period, as well as recognition for the full period in the current year as compared to a partial period in the prior year, partially offset by the completion of stock-based compensation expense for fully vested stock options previously granted to employees and non-employees. See our unaudited condensed consolidated financial statements Note 4, *Stock-Based Compensation*, for a discussion of stock-based compensation expense recognized with respect to the PAVmed Inc. 2014 Equity Plan.

The outside professional services expense of \$677,855 incurred during the three months ended September 30, 2019 as compared to the corresponding prior year period, increased by \$175,538, principally resulting from increased expenses of: \$151,979 associated with professional fees for management consulting, legal, accounting, audit, tax, and valuation services; \$73,987 related to intellectual property matters; \$43,777 related to investor relations, \$21,916 related to marketing activities, including trade shows and promotion. These increases were partially offset by decreased expenses of: \$41,121 related to consulting fees associated with regulatory matters; and \$75,000 of in connection with consulting agreements with entities and /or individuals affiliated with certain of our former directors, including with respect to the HCP/Advisors consulting agreement, with such consulting agreement having an October 31, 2018 expiration date; and

The facility related costs of \$94,310 incurred in the three months ended September 30, 2019 increased by \$56,127 as compared to the corresponding prior year period, principally resulted from higher shipping and delivery fees, and higher rent expense associated with our corporate offices.

The board of director related costs of \$74,375 for the three months ended September 30, 2019 as compared to the corresponding prior year period, increased by \$12,708, as board of director fees commenced in the three months ended September 30, 2019 for the Company's non-executive Vice Chairman and board member, partially offset by overall lower board fees resulting from changes in various committee assignments of the other non-executive board members in the current year as compared to the corresponding prior year period.

The other operating costs in the three months ended September 30, 2019 of \$188,056 increased \$62,832 as compared to the prior year period, principally resulting from higher travel related and insurance expenses.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued**Financial Results of Operations** - continued*Comparison of the Three Months Ended September 30, 2019 and 2018- continued**Research and Development Expense*

	Three Months Ended September 30,			
	2019	2018	\$ Change	%Change
Compensation and related personnel costs	\$ 359,198	\$ 175,875	\$ 183,323	104%
Stock-based compensation	61,374	76,655	(15,281)	-20%
Outside professional services	1,077,937	917,228	160,709	18%
Patent license fee	—	—	—	0%
Milestone	—	—	—	0%
Other operating costs	20,906	3,086	17,820	577%
Total research and development expense	\$ 1,519,415	\$ 1,172,844	\$ 346,571	30%

Research and development expenses incurred for the three months ended September 30, 2019 totaled \$1,519,415, an increase of \$346,571 as compared to \$1,172,844 incurred for the corresponding prior year period. The increase in research and development expenses resulted principally from increased expenses of \$183,323 related to compensation and related personnel costs, \$160,709 of increased expenses incurred for outside professional services, and \$17,820 of increased other operating costs, partially offset by a decrease of \$15,281 of stock-based compensation expense classified as research and development expense.

The increased compensation and related personnel costs expense of \$183,323 in the three months ended September 30, 2019 as compared to the corresponding prior year period, resulted from higher salary expense related to additional personnel, as well as annual salary increases.

The stock-based compensation expense classified as research and development expense includes such expense recognized with respect to stock options granted to both employees and non-employees under each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Long-Term Equity Plan (“Lucid Diagnostics Inc. 2018 Equity Plan”). The stock-based compensation expense classified as research and development expense of \$61,374 incurred in the three months ended September 30, 2019 decreased by \$15,281 as compared to the corresponding prior year period, principally resulting from decreased stock-based compensation expense related to stock options granted under the Lucid Diagnostics Inc. 2018 Equity Plan to non-employees resulting from lower estimated fair value of the common stock of Lucid Diagnostics Inc. and the absence of stock-based compensation expense in the current period as a result of the completion of stock-based compensation expense for fully vested stock options previously granted to employees, partially offset by stock options granted in 2019, resulting in the recognition of stock based compensation expense in the current period for which there is no such expense in the corresponding prior year period, as well as recognition for the full period in the current year as compared to a partial period in the prior year. See our unaudited condensed consolidated financial statements Note 4, *Stock-Based Compensation*, for a discussion of stock-based compensation expense recognized with respect to each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan.

The outside professional services of \$1,077,937 in the three months ended September 30, 2019 was an increase of \$160,709 as compared to the corresponding prior year period. The increased outside professional services research and development expense principally resulted from our emphasis on current research and development activities, including clinical trials and animal studies, being focused principally on completion of on-going efforts to obtain FDA clearance and /or initializing commercialization of each of CarpX™, EsoGuard™, and PortIO™, and to continue to advance the development of DisappEAR™ and NextFlo, as discussed above under “Overview”.

The increased other operating expenses in the three months ended September 30, 2019 as compared to the prior year period, principally resulted from higher depreciation expense, workers’ compensation insurance expense, and travel related costs.

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

Financial Results of Operations - continued

Comparison of the Three Months Ended September 30, 2019 and 2018- continued

Other Income and Expense

Senior Secured Convertible Note - Change in Fair Value and Debt Extinguishment Loss

On December 27, 2018, in a private placement transaction with an institutional investor, we entered into a Securities Purchase Agreement under which we issued a Senior Secured Convertible Note - referred to as the "December 2018 Senior Convertible Note". The December 2018 Senior Convertible Note has an issue date of December 27, 2018, a contractual maturity date of December 31, 2020, a face value principal of \$7.75 million, and a stated interest rate of 7.875% per annum. During its term, at the election of the Holder, the December 2018 Senior Convertible Note may be converted partially or in-full into shares of our common stock.

The December 2018 Senior Convertible Note is accounted for under the guidance of the "fair value option" ("FVO") of Financial Accounting Standards Board ("FASB") Accounting Standards Codification™ ("ASC") Topic 825, *Financial Instruments*, ("ASC 825") including the FVO election provided for under ASC 825-10-15-4. As such, the December 2018 Senior Convertible Note was initially measured at its December 27, 2018 issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date, with changes in estimated fair value recognized as current period income or expense, to the extent such change is not the result of a change in the instrument-specific credit risk of the December 2018 Senior Convertible Note.

The December 2018 Senior Convertible Note fair value adjustments resulted in the recognition of income of \$379,229 in the three months ended September 30, 2019. As the December 2018 Senior Convertible Note was issued on December 27, 2018, there is no such fair value adjustment recognized in the corresponding prior year period.

As of September 30, 2019, the December 2018 Senior Convertible Note face value principal was approximately \$4.4 million, as compared to approximately \$6.2 million as of June 30, 2019, and, as noted above, \$7.75 million as of December 31, 2019. In this regard, in the three months ended September 30, 2019, aggregate face value principal repayments of \$1,850,000 and \$89,332 of corresponding non-installment payments were settled by the issue of a total of 2,334,186 shares of our common stock.

In the three nine months ended September 30, 2019, we recognized a debt extinguishment loss of \$406,858, resulting from the difference between the face value principal repayments and corresponding non-installment payments, as noted above, and the fair value of the shares of our common stock issued upon conversion, with the common stock fair value measured as the respective issue date quoted closing price per share of our common stock.

The estimated fair value of the December 2018 Senior Convertible Note as of each of the respective dates noted were each computed using a combination of the present value of its cash flows using a synthetic credit rating analysis' required rate of return and the Black-Scholes option pricing model, using the Company's common stock price, the Company's dividend yield, the risk-free rates based on U.S. Treasury security yields, estimated volatility in the value of the Company's common stock, and the December 2018 Senior Convertible Note stated conversion price.

See our unaudited condensed consolidated financial statements Note 5, *Financial Instruments Fair Value Measurements*, and Note 6, *Debt*, for a further discussion of the Senior Secured Convertible Note issued December 27, 2018.

Senior Secured Note - Interest Expense

As discussed in our Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, on the December 27, 2018 issue date of the December 2018 Senior Convertible Note discussed above, we repaid-in-full the previously issued Senior Secured Note, inclusive of the total outstanding principal payable and the accrued but unpaid interest expense payable as of December 27, 2018. The Senior Secured Note total interest expense of \$707,714 recognized in the three months ended September 30, 2018, was comprised of \$201,866 with respect to the 15% interest expense and \$505,848 related to the amortization of the debt discount.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued

Financial Results of Operations - continued

Comparison of the Three Months Ended September 30, 2019 and 2018- continued

Other Income and Expense - continued

Modification Expense - Unit Purchase Option Exchange Offer - August 22, 2018

Previously, on the April 28, 2016 closing date of the Company’s initial public offering (“IPO”), a total of 53,000 unit purchase options were issued to the IPO selling agents, with each such unit purchase option issued on April 28, 2016 referred to as a “UPO-W”. The UPO-W, with an exercise price of \$5.50 per unit, could have been exercised to purchase the same unit issued in the Company’s IPO, with such unit comprised of one share of common stock of the Company and one Series W Warrant to purchase one share of common stock of the Company at an exercise price of \$5.00 per share. The UPO-W had a January 29, 2021 expiration date.

As discussed more fully in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, on August 22, 2018, the “UPO Exchange Offer” was completed, wherein, 53,000 “UPO-Z” were issued-upon-exchange of all the previously issued and outstanding 53,000 UPO-W. The UPO-Z, with an exercise price of \$5.50 per unit, may be exercised to purchase a unit comprised of one share of common stock of the Company and one Series Z Warrant to purchase one share of common stock of the Company at an exercise price of \$1.60 per share. The UPO-Z has a January 29, 2021 expiration date.

The UPO Exchange Offer resulted in the recognition of a modification expense on the August 22, 2018 Exchange Date of \$2,120, with a corresponding increase to additional paid-in capital, which was the incremental fair value resulting from the estimated fair value of \$3,180 of the 53,000 UPO-Z issued-upon-exchange as compared of the estimated fair value of \$1,060 of the 53,000 UPO-W extinguished-upon-exchange.

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

Financial Results of Operations - continued

Comparison of the Nine Months Ended September 30, 2019 and 2018

	Nine Months Ended September 30,	
	2019	2018
Revenue	\$ —	\$ —
Operating expense		
General and administrative expense	5,331,130	4,366,438
Research and development expense	4,375,425	2,884,873
Total operating expense	<u>9,706,555</u>	<u>7,251,311</u>
Loss from operations	(9,706,555)	(7,251,311)
Other income (expense)		
Interest expense - Senior Secured Note	—	(1,708,322)
Change in fair value - Senior Secured Convertible Note	(340,830)	—
Debt extinguishment loss - Senior Secured Convertible Note	(666,670)	—
Series A and Series A-1 Exchange Offer - March 15, 2018	—	(349,796)
Series W Warrants Exchange Offer - April 5, 2018	—	(766,456)
Modification - Series Z Warrant Agreement - June 1, 2018	—	(1,140,995)
Unit Purchase Options (UPOs) Exchange Offer – August 22, 2018 – incremental fair value – UPO-Z issued-upon-exchange of UPO-W	—	(2,120)
Change in fair value - Series A Warrants derivative liability	—	(96,480)
Change in fair value - Series A Convertible Preferred Stock conversion option derivative liability	<u>—</u>	<u>64,913</u>
Other income (expense), net	(1,007,500)	(3,999,256)
Loss before income tax	(10,714,055)	(11,250,567)
Provision for income taxes	<u>—</u>	<u>—</u>
Net loss - before noncontrolling interest	(10,714,055)	(11,250,567)
Net loss attributable to noncontrolling interest	<u>500,622</u>	<u>113,631</u>
Net loss - attributable to PAVmed Inc.	<u>(10,213,433)</u>	<u>(11,136,936)</u>
Less: Series B Convertible Preferred Stock dividends	(199,065)	(138,926)
Less: Series A-1 Convertible Preferred Stock dividends	—	(25,148)
Less: Series A Convertible Preferred Stock dividends	—	(26,487)
Series A and Series A-1 Exchange Offer - March 15, 2018 - incremental fair value - Series B Convertible Preferred Stock issued-upon-exchange of Series A Convertible Preferred Stock	—	(726,531)
Series A and Series A-1 Exchange Offer - March 15, 2018 - incremental fair value - Series B Convertible Preferred Stock issued upon exchange of Series A-1 Convertible Preferred Stock	<u>—</u>	<u>199,241</u>
Net loss attributable to PAVmed Inc. common stockholders	<u>\$ (10,412,498)</u>	<u>\$ (11,854,787)</u>

Revenue

As discussed above, to date, we have not generated any revenues from product sales. Our ability to generate product revenue and become profitable depends upon our ability to successfully complete the development and initiate the commercialization of our products.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations- continued**Financial Results of Operations - continued***Comparison of the Nine Months Ended September 30, 2019 and 2018- continued**General and Administrative Expense*

	Nine Months Ended September 30,			
	2019	2018	\$ Change	%Change
Compensation and related personnel costs	\$ 1,317,460	\$ 948,687	\$ 368,773	39%
Stock-based compensation	852,868	701,174	151,694	22%
Outside professional services	2,253,710	2,094,098	159,612	8%
Facility related costs	193,931	114,363	79,568	70%
Board related costs	196,875	196,667	208	0%
Other operating costs	516,286	311,449	204,837	66%
Total general and administrative expense	\$ 5,331,130	\$ 4,366,438	\$ 964,692	22%

General and administrative expenses incurred in the nine months ended September 30, 2019 of \$5,331,130 is an increase of \$964,692 as compared to \$4,366,438 incurred for corresponding prior year period, with the increase principally due to increased expenses related to compensation and related personnel costs of \$368,773, stock based compensation of \$151,694, outside professional services of \$159,612, and \$204,837 in other operating costs.

The increased compensation and related personnel costs expense of \$1,317,460 in the nine months ended September 30, 2019 as compared to the corresponding prior year period, resulted from higher salary and benefit expense related to the hiring of additional personnel and annual salary increases.

The stock-based compensation expense classified as general and administrative expense includes stock options granted to both employees and non-employees and restricted stock awards granted to employees under the PAVmed Inc. 2014 Equity Plan. The stock-based compensation expense classified as general and administrative expense of \$852,868 incurred during the nine months ended September 30, 2019 increased by \$151,694 as compared to the corresponding prior year period, principally resulting from stock options granted after September 30, 2018, along with additional stock options and restricted stock awards granted in 2019, resulting in the recognition of stock based expense in the current period for which there is no such expense in the corresponding prior year period, as well as recognition for the full period in the current year as compared to a partial period in the prior year, partially offset by the completion of stock-based compensation expense for fully vested stock options previously granted to employees and non-employees. See our unaudited condensed consolidated financial statements Note 4, *Stock-Based Compensation*, for a discussion of stock-based compensation expense recognized with respect to the PAVmed Inc. 2014 Equity Plan.

The outside professional services expense of \$2,253,710 incurred during the nine months ended September 30, 2019 as compared to the corresponding prior year period, increased by \$159,612, principally resulting from increased expenses of: \$289,132 related to intellectual property matters; \$103,340 related to marketing activities, including trade shows and promotion; and \$225,003 related to investor relations. These increases were partially offset by decreased expenses of: \$215,078 associated with professional fees for legal services, which were higher in the prior year period in connection with our financing transactions including the various exchange offers; \$225,000 of expense in connection with consulting agreements with entities and /or individuals affiliated with certain of our former directors, including with respect to the HCP/Advisors consulting agreement, with such consulting agreement having an October 31, 2018 expiration date; and \$17,785 related to consulting fees associated with regulatory matters.

The facility related costs of \$193,931 incurred during the nine months ended September 30, 2019 increased by \$79,568 as compared to the corresponding prior year period, principally resulted from higher shipping and delivery fees, and higher rent expense associated with our corporate offices.

The board of director related costs, which represent fees paid to non-executive members of our board of directors, of \$196,875 for the nine months ended September 30, 2019 were consistent with such costs in the corresponding prior year period.

The other operating costs in the nine months ended September 30, 2019 of \$516,286 increased \$204,837 as compared to the prior year period, principally resulting from higher travel related and insurance expenses.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued**Financial Results of Operations - continued***Comparison of the Nine Months Ended September 30, 2019 and 2018- continued**Research and Development Expense*

	Nine Months Ended September 30,			
	2019	2018	\$ Change	%Change
Compensation and related personnel costs	\$ 980,167	\$ 433,262	\$ 546,905	126%
Stock-based compensation	324,414	198,474	125,940	63%
Outside professional services	2,957,531	1,973,978	983,553	50%
Patent license fee	—	272,553	(272,553)	-100%
Milestone	75,000	—	75,000	100%
Other operating costs	38,313	6,606	31,707	480%
Total research and development expense	\$ 4,375,425	\$ 2,884,873	\$ 1,490,552	52%

Research and development expenses incurred for the nine months ended September 30, 2019 totaled \$4,375,425, an increase of \$1,490,552 as compared to \$2,884,873 incurred for the corresponding prior year period. The increase in research and development expenses resulted principally from increased expenses of: \$546,906 related to compensation and related personnel costs, \$125,940 related to stock-based compensation, \$983,553 of increased expenses incurred for outside professional services, \$75,000 for a milestone payment, and \$31,707 of increased other operating costs, partially offset by the absence of a \$272,553 patent license fee incurred in the prior year period.

The increased compensation and related personnel costs expense of \$546,906 in the nine months ended September 30, 2019 as compared to the corresponding prior year period, resulted from higher salary expense related to additional personnel, as well as annual salary increases.

The consolidated stock-based compensation expense classified as research and development expense includes the expense related to stock options granted to both employees and non-employees under each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan. In this regard, the stock-based compensation expense classified as research and development expense of \$324,414 incurred during the nine months ended September 30, 2019 increased by \$125,940 as compared to the corresponding prior year period, principally resulting from stock options granted in 2019, resulting in the recognition of stock based compensation expense in the current period for which there is no such expense in the corresponding prior year period, as well as recognition for the full period in the current as compared to a partial period in the prior year. See our unaudited condensed consolidated financial statements Note 4, *Stock-Based Compensation*, for a discussion of stock-based compensation expense recognized with respect to each of the PAVmed Inc. 2014 Equity Plan and the Lucid Diagnostics Inc. 2018 Equity Plan.

The outside professional services of \$2,957,531 in the nine months ended September 30, 2019 was an increase of \$983,553 as compared to the corresponding prior year period. The increased outside professional services research and development expense principally resulted from our emphasis of current research and development activities, including clinical trials and animal studies, being focused principally on completion of on-going efforts to obtain FDA clearance and /or initializing commercialization of each of CarpX™, EsoGuard™, and PortIO™, and to continue to advance the development of DisappEAR™ and NextFlo, as discussed above under “Overview”.

The patent license fee expense of \$272,553 incurred in the nine months ended September 30, 2018 was in connection with the “CWRU License Agreement” with respect to “EsoCheck™” and “EsoGuard™”, as discussed above.

The milestone expense of \$75,000 incurred in the nine months ended September 30, 2019 is in connection with the “CWRU License Agreement” with respect to the June 21, 2019 FDA approval of the “EsoCheck™” esophageal cell sample collection device as discussed above.

The increased other operating expenses in the nine months ended September 30, 2019 as compared to the prior year period, principally resulted from higher depreciation expense, workers’ compensation insurance expense, and travel related costs.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued

Financial Results of Operations - continued

Comparison of the Nine Months Ended September 30, 2019 and 2018- continued

Other Income and Expense

Senior Secured Convertible Note - December 2018 - Change in Fair Value and Debt Extinguishment Loss

On December 27, 2018, in a private placement transaction with an institutional investor, we entered into a Securities Purchase Agreement under which we issued a Senior Secured Convertible Note - referred to as the “December 2018 Senior Convertible Note”. The December 2018 Senior Convertible Note has an issue date of December 27, 2018, a contractual maturity date of December 31, 2020, a face value principal of \$7.75 million, and a stated interest rate of 7.875% per annum. During its term, at the election of the Holder, the December 2018 Senior Convertible Note may be converted partially or in-full into shares of our common stock.

The December 2018 Senior Convertible Note is accounted for under the guidance of the “fair value option” (“FVO”) of Financial Accounting Standards Board (“FASB”) Accounting Standards Codification™ (“ASC”) Topic 825, *Financial Instruments*, (“ASC 825”) including the FVO election provided for under ASC 825-10-15-4. As such, the December 2018 Senior Convertible Note was initially measured at its December 27, 2018 issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date, with changes in estimated fair value recognized as current period income or expense, to the extent such change is not the result of a change in the instrument-specific credit risk of the December 2018 Senior Convertible Note.

The December 2018 Senior Convertible Note fair value adjustments resulted in the recognition of an expense of \$340,830 in the nine months ended September 30, 2019. As the December 2018 Senior Convertible Note was issued on December 27, 2018, there is no such fair value adjustment recognized in the corresponding prior year period.

As of September 30, 2019, the December 2018 Senior Convertible Note face value principal was approximately \$4.4 million. In this regard, in the nine months ended September 30, 2019, aggregate face value principal repayments of \$3,381,000 and \$112,293 of corresponding non-installment payments were settled by the issue of a total of 3,850,427 shares of our common stock.

In the nine months ended September 30, 2019, we recognized a debt extinguishment loss of \$666,670, resulting from the difference between the face value principal repayments and corresponding non-installment payments, as noted above, and the fair value of the shares of our common stock issued upon conversion, with the common stock fair value measured as the respective issue date quoted closing price per share of our common stock.

The estimated fair value of the December 2018 Senior Convertible Note as of each of the respective dates noted were each computed using a combination of the present value of its cash flows using a synthetic credit rating analysis’ required rate of return and the Black-Scholes option pricing model, using our common stock price, our dividend yield, the risk-free rates based on U.S. Treasury security yields, estimated volatility in the value of our common stock, and the December 2018 Senior Convertible Note stated conversion price.

See our unaudited condensed consolidated financial statements Note 5, *Financial Instruments Fair Value Measurements*, and Note 6, *Debt*, for a further discussion of the December 2018 Senior Secured Convertible Note.

Senior Secured Note - Interest Expense

As discussed in our Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, on the December 27, 2018 issue date of the December 2018 Senior Convertible Note discussed above, we repaid-in-full the previously issued Senior Secured Note, inclusive of the total outstanding principal payable and the accrued but unpaid interest expense payable as of December 27, 2018. The Senior Secured Note total interest expense of \$1,708,322 recognized in the nine months ended September 30, 2018, was comprised of \$591,007 with respect to the 15% interest expense and \$1,117,315 related to the amortization of the debt discount.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued

Financial Results of Operations - continued

Comparison of the Nine Months Ended September 30, 2019 and 2018- continued

Other Income and Expense - continued

Overview - “Series A and Series A-1 Exchange Offer” - March 15, 2018 Exchange Date

As more fully discussed in Company’s Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, the “Series A and Series A-1 Exchange Offer”, completed on March 15, 2018, was offered to and accepted by all holders of both the Series A Convertible Preferred Stock and Series A Warrants, and the Series A-1 Convertible Preferred Stock and Series A-1 Warrants, wherein shares of Series B Convertible Preferred Stock were issued-upon-exchange of shares of each of Series A and Series A-1 Convertible Preferred Stock and Series Z Warrants were issued-upon-exchange of each of Series A and Series A-1 Warrants - referred to as the “Series A and Series A-1 Exchange Offer” and the “March 15, 2018 Exchange Date”.

The Series Z Warrants issued-upon-exchange of Series A-1 Warrants in the Series A and Series A-1 Exchange Offer, as such exchange offer is discussed above, resulted in the recognition of a modification expense of \$349,796, which was recognized on such exchange date as a current period modification expense in other income (expense) in the consolidated statement of operations, with a corresponding increase to additional paid in capital, as the Series Z Warrants are equity classified.

Modification Expense - Series W Warrants Exchange Offer - April 5, 2018

As discussed above and more fully in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, A total of 5,075,849 Series Z Warrants were issued-upon-exchange of 10,151,682 Series W Warrants, in an exchange offer transaction referred to as the “Series W Warrants Exchange Offer” and the “April 5, 2018 Exchange Date”. The Series W Warrant Exchange Offer resulted in the recognition of a modification expense on the April 5, 2018 Exchange Date of \$766,456, which was recognized on the April 5, 2018 Exchange Date as a current period modification expense in other income (expense), with a corresponding increase to additional paid in capital, as the Series Z Warrants are equity classified.

Modification Expense - Series Z Warrant Agreement Amendment - June 1, 2018

As discussed above and more fully in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, the Series Z Warrant exercise price initially was \$3.00 per share through May 31, 2018, and then \$1.60 per share effective June 1, 2018. The Series Z Warrant exercise price adjustment resulted in the recognition of a modification expense on the June 1, 2018 effective date of the modification of the warrant exercise price of \$1,140,995 included in other income (expense), with a corresponding increase to additional paid-in capital, as the Series Z Warrants are equity classified.

Modification Expense - Unit Purchase Option Exchange Offer - August 22, 2018

Previously, on the April 28, 2016 closing date of the Company’s initial public offering (“IPO”), a total of 53,000 unit purchase options were issued to the IPO selling agents, with each such unit purchase option issued on April 28, 2016 referred to as a “UPO-W”. The UPO-W, with an exercise price of \$5.50 per unit, could have been exercised to purchase the same unit issued in the Company’s IPO, with such unit comprised of one share of common stock of the Company and one Series W Warrant to purchase one share of common stock of the Company at an exercise price of \$5.00 per share. The UPO-W had a January 29, 2021 expiration date.

As discussed more fully in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, on August 22, 2018, the “UPO Exchange Offer” was completed, wherein, 53,000 “UPO-Z” were issued-upon-exchange of all the previously issued and outstanding 53,000 UPO-W. The UPO-Z, with an exercise price of \$5.50 per unit, may be exercised to purchase a unit comprised of one share of common stock of the Company and one Series Z Warrant to purchase one share of common stock of the Company at an exercise price of \$1.60 per share. The UPO-Z has a January 29, 2021 expiration date.

The UPO Exchange Offer resulted in the recognition of a modification expense on the August 22, 2018 Exchange Date of \$2,120, with a corresponding increase to additional paid-in capital, which was the incremental fair value resulting from the estimated fair value of \$3,180 of the 53,000 UPO-Z issued-upon-exchange as compared of the estimated fair value of \$1,060 of the 53,000 UPO-W extinguished-upon-exchange.

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

Financial Results of Operations - continued

Comparison of the Nine Months Ended September 30, 2019 and 2018- continued

Other Income and Expense - continued

Change in Fair Value - Derivative Liability - Series A Warrants Derivative Liability and Series A Convertible Preferred Stock Conversion Option

As discussed more fully in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 previously filed with the SEC on April 2, 2019, the Series A Warrants derivative liability and the Series A-1 Convertible Preferred Stock conversion option derivative liability were each initially measured at fair value at the time of issuance and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date, with changes in estimated fair value of each respective derivative liability recognized as other income or expense.

As of the March 15, 2018 Exchange Date of the Series A and Series A-1 Exchange Offer each of the corresponding Series A Warrants derivative liability and the Series A Convertible Preferred Stock conversion option derivative liability were each fully extinguished-upon-exchange as of the March 15, 2018 Exchange Date. Accordingly, there was no recognition of income or expense related to the change in estimated fair value of each such derivative liability after the March 15, 2018 Exchange Date.

In this regard, during the three months ended March 31, 2018, as of the March 15, 2018 Exchange Date, the change in the estimated fair value of each respective derivative liability resulted in the recognition of income of \$64,913 with respect to the Series A Convertible Preferred Stock conversion option derivative liability, and the recognition of a net expense of \$96,480 with respect to the Series A Warrants derivative liability.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations- continued

Financial Results of Operations - continued

Non-GAAP Financial Measures

The discussion above is with respect to our financial results of operations as presented in our unaudited condensed consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

To supplement our unaudited condensed consolidated financial statements presented in accordance U.S. GAAP, we provide certain non-GAAP financial measures (“NGFM”) of our consolidated financial results of operations, including such amounts captioned: “net loss before interest, taxes, depreciation, and amortization” or “EBITDA”, and “non-GAAP Adjusted Loss”, as presented herein below. Importantly, we note the NGFM measures captioned “EBITDA” and “non-GAAP Adjusted Loss” are not recognized terms under U.S. GAAP, and as such, they are not a substitute for, considered superior to, considered separately from, nor as an alternative to, U.S. GAAP and /or the most directly comparable U.S. GAAP financial measures.

We believe the NGFM provide useful information by isolating certain expenses, gains, and losses, which are not necessarily indicative of the financial results resulting from our operations and business outlook. In this regard, the presentation of the NGFM is to assist the reader of our unaudited condensed consolidated financial statements presented in accordance with U.S. GAAP to understand the effects of the impact on our consolidated statement of operations of certain items, including:

- * Stock-based compensation expense
- * Change in estimated fair value of the Senior Secured Convertible Note issued December 27, 2018
- * Loss on extinguishment of debt in connection with the partial repayment of the Senior Secured Convertible Note issued December 27, 2018
- * Modification expense recognized with respect to various “Exchange Offers”
- * Change in estimated fair value of derivative liability of each of the previously issued and outstanding Series A Warrant and the Series A Convertible Preferred Stock conversion option (through the March 15, 2018 Exchange Date of the Series A and Series A-1 Exchange Offer).

The NGFM are presented with the intent of providing greater transparency of information used by us in the analysis of the financial performance of our operations and operational decision-making. Additionally, we believe these NGFM provide meaningful information to assist investors, shareholders, and other readers of our unaudited condensed consolidated financial statements prepared in accordance with U.S. GAAP, in making comparisons to prior year consolidated financial statements, and analyzing the underlying consolidated financial results of our operations. The NGFM are provided to enhance readers’ overall understanding of our current consolidated financial results and to provide further information to enhance the comparability of consolidated financial results between the current year period and the prior year period, however, as noted, the NGFM are not intended to be a substitute for U.S. GAAP.

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

Financial Results of Operations - continued

Non-GAAP Financial Measures - continued

A reconciliation to the most directly comparable U.S. GAAP measure to NGFM, as discussed above, for the periods noted, is as follows:

	Three Months Ended September 30,		
	2019	2018	\$ Change
Net loss attributable to PAVmed Inc. common stockholders	\$ (3,153,089)	\$ (3,311,124)	\$ 158,035
Series B Convertible Preferred Stock dividends	68,129	64,897	3,232
Net loss - attributable to PAVmed Inc	(3,084,960)	(3,246,227)	161,267
Adjustments			
Depreciation expense	3,779	2,639	1,140
Interest expense - Senior Secured Note	—	707,714	(707,714)
Income tax provision	—	—	—
EBITDA	(3,081,181)	(2,535,874)	(545,307)
Stock-based compensation expense	330,233	324,473	5,760
December 2018 Senior Convertible Note - fair value adjustment	(379,229)	—	(379,229)
December 2018 Senior Convertible Note - extinguishment loss	406,858	—	406,858
Series W Warrants Exchange Offer - April 5, 2018	—	—	—
Series Z Warrants - June 1, 2018	—	—	—
Unit Purchase Options Exchange Offer - August 22, 2018	—	2,120	(2,120)
Non-GAAP Adjusted Loss	\$ (2,723,319)	\$ (2,209,281)	\$ (514,038)
	Nine Months Ended September 30,		
	2019	2018	\$ Change
Net loss attributable to PAVmed Inc. common stockholders	\$ (10,413,835)	\$ (11,854,787)	\$ 1,440,952
Series B Convertible Preferred Stock dividends	200,402	138,926	61,476
Series A-1 Convertible Preferred Stock dividends	—	25,148	(25,148)
Series A Convertible Preferred Stock dividends	—	26,487	(26,487)
Series A and Series A-1 Exchange Offer - March 15, 2018 - Series B Convertible Stock issued-upon-exchange of Series A Convertible Preferred Stock	—	726,531	(726,531)
Series A and Series A-1 Exchange Offer - March 15, 2018 - Series B Convertible Stock issued-upon exchange of Series A-1 Convertible Preferred Stock	—	(199,241)	199,241
Net loss - attributable to PAVmed Inc	(10,213,433)	(11,136,936)	923,503
Adjustments			
Depreciation expense	10,328	6,244	4,084
Interest expense - Senior Secured Note	—	1,708,322	(1,708,322)
Income tax provision	—	—	—
EBITDA	(10,203,105)	(9,422,370)	(780,735)
Stock-based compensation expense	1,177,282	899,649	277,633
December 2018 Senior Convertible Note - fair value adjustment	340,830	—	340,830
December 2018 Senior Convertible Note - extinguishment loss	666,670	—	666,670
Series A and Series A-1 Exchange Offer - March 15, 2018	—	349,796	(349,796)
Series W Warrants Exchange Offer - April 5, 2018	—	766,456	(766,456)
Series Z Warrants - June 1, 2018	—	1,140,995	(1,140,995)
Unit Purchase Options Exchange Offer - August 22, 2018	—	2,120	(2,120)
Change in fair value - Series A Warrants derivative liability	—	96,480	(96,480)
Change in fair value - Series A Convertible Preferred Stock conversion option derivative liability	—	(64,913)	64,913
Non-GAAP Adjusted Loss	\$ (8,018,323)	\$ (6,231,787)	\$ (1,786,536)

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

Liquidity and Capital Resources

Overview - Financing

Issue of Common Stock - Registered Offerings

In the nine months ended September 30, 2019, a total of 5,480,000 shares of common stock of the Company were issued in registered offerings, including 4,950,000 shares issued under common stock share subscription agreements entered into with individual investors and 530,000 shares issued under a placement agency agreement, resulting in total proceeds of \$5,480,000, before placement agent fees and legal fees of \$101,098.

Issue of Common Stock - Conversions - Senior Secured Convertible Note - Issued December 27, 2018

We issued a Senior Secured Convertible Note with an issue date of December 27, 2018, a face value principal of \$7.75 million a stated interest rate of 7.875% per annum, and a contractual maturity date of December 31, 2020 - referred to as the "December 2018 Senior Convertible Note". At the election of the Holder, the December 2018 Senior Convertible Note may be converted into shares of our common stock. As of September 30, 2019, the December 2018 Senior Convertible Note face value principal was approximately \$4.4 million, as result of approximately \$3.4 million face value principal repayments, as discussed below.

The December 2018 Senior Convertible Note proceeds were \$7.0 million after payment of \$750,000 of lender fees. We incurred total offering costs of \$614,940, inclusive of the payment of a \$455,000 placement agent fee and legal fees, with such offering costs recognized as a current period expense on December 27, 2018.

The December 2018 Senior Convertible Note is accounted for under the guidance of the "fair value option" ("FVO") of FASB ASC Topic 825, *Financial Instruments* ("ASC 825"), including the FVO election provided for under ASC 825-10-15-4. As such, the December 2018 Senior Convertible Note was initially measured at its December 27, 2018 issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date, with changes in estimated fair value recognized as current period income or expense, to the extent such change is not the result of a change in the instrument-specific credit risk of the December 2018 Senior Convertible Note.

The December 2018 Senior Convertible Note fair value adjustments resulted in the recognition of income of \$379,229 and expense of \$340,830 in the three and nine months ended September 30, 2019, respectively. As the December 2018 Senior Convertible Note was issued on December 27, 2018, there is no such fair value adjustment recognized in the corresponding prior year period.

In the three nine months ended September 30, 2019, with respect to the December 2018 Senior Convertible Note, aggregate principal repayments of \$1,850,000 and \$3,381,000, respectively, and 89,332 and \$112,293 of corresponding non-installment payments, respectively, were settled by the issue of 2,334,186 and 3,850,427, shares of common stock of the Company, respectively, resulting in a debt extinguishment loss in the three and nine months ended September 30, 2019, of \$406,858 and \$666,670, respectively.

See our unaudited condensed consolidated financial statements Note 5, *Financial Instruments Fair Value Measurements*, and Note 6, *Debt*, for further information with respect to the Senior Secured Convertible Note issued December 27, 2018.

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

Liquidity and Capital Resources - continued

Senior Secured Convertible Note - November 2019

As more fully described in our unaudited condensed consolidated financial statements Note 10, *Subsequent Events*, on November 3, 2019, PAVmed Inc. entered into a Securities Purchase Agreement ("SPA") with two institutional investors, and pursuant to the SPA, on November 4, 2019 the Company consummated the sale of two series of Senior Secured Convertible Notes in a private placement with a \$14.0 million aggregate face value principal referred to herein as the "November 2019 Senior Convertible Notes". The November 2019 Senior Convertible Notes were further divided in a Series A and Series B, each with an aggregate face value principal of \$7.0 million inclusive of "OID" of \$700,000.

In exchange for the Series A notes, the Company received \$6.3 million cash proceeds at closing before payment of a related financial advisory fee of \$409,500. Additionally, in exchange for the Series B notes, the Company received secured promissory Investor Notes in the aggregate amount of \$6.3 million. Until such time that the Investor Notes are paid in cash to the Company, they will be considered restricted and are prohibited from being converted into common shares of the Company. The Series B Investor Notes are subject to optional prepayment by each investor at any time at the option of the investor, and mandatory prepayment, at the Company's option, subject to certain equity conditions including, among other conditions, the effectiveness of a resale registration statement. Under certain conditions, the Investor or the Company, may offset the Series B notes against the Investor notes. If the respective Series B Investor Notes are each subsequently satisfied by payment in cash, the Company will incur additional financial advisory fees of \$409,500.

Going Concern

The provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 205-40, *Presentation of Financial Statements - Going Concern* (ASC Topic 205-40) requires management to assess an entity's ability to continue as a going concern within one year of the date of the financial statements are issued. In each reporting period (including interim periods), an entity is required to assess conditions known and reasonably knowable as of the financial statement issuance date to determine whether it is probable an entity will not meet its financial obligations within one year from the financial statement issuance date. Substantial doubt about an entity's ability to continue as a going concern exists when conditions and events, considered in the aggregate, indicate it is probable the entity will be unable to meet its financial obligations as they become due within one year after the date the financial statements are issued.

We anticipate incurring operating losses and do not expect to generate positive cash flows from operating activities, if any, for the next several years as we complete the development of our products, file for and request regulatory approvals and clearances of such products and begin to commercially market such products. These factors raise substantial doubt about our ability to continue as a going concern within one year after the date our unaudited condensed consolidated financial statements are issued.

Our ability to fund our operations is dependent upon management's plans, which include raising additional capital, refinancing our debt upon maturity, obtaining regulatory approvals for our products currently under development, commercializing and generating revenues from our products currently under development, and continuing to control expenses. However, there is no assurance we will be successful in these efforts.

Our unaudited condensed consolidated financial statements have been prepared on a going concern basis which contemplates the realization of assets and satisfaction of liabilities and commitments in the normal course of business. The unaudited condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities should we be unable to continue as a going concern.

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

Liquidity and Capital Resources - continued

Cash flows and liquidity

The cash flow sources and uses for operating, investing, and financing activities, for respective period presented is as follows:

	Nine Months June 30,	
	2019	2018
Net cash flows (used in) or provided by:		
Operating activities	\$ (9,266,877)	\$ (5,768,637)
Investing activities	(25,058)	(23,464)
Financing activities	5,167,336	13,498,613
Net (decrease) increase in cash	(4,124,599)	7,706,512
Cash, beginning of period	8,222,119	1,535,022
Cash, end of period	\$ 4,097,520	\$ 9,241,534

Operating Activities

Net cash flows used in operating activities totaled \$9,266,877 and \$5,768,637 in the nine months ended September 30, 2019 and 2018, respectively, consisting of: a net loss before noncontrolling interest of \$10,714,055 and \$11,250,567, respectively, and non-cash adjustments to the net loss before noncontrolling interest of cash flows provided of \$2,195,110 and \$4,710,579, and a change in operating assets and liabilities, net resulting in cash flows used of \$747,932 and cash flows provided of \$771,351 in the nine months ended September 30, 2019 and 2018, respectively, as follows:

	Nine Months Ended June 30,	
	2019	2018
<i>Non-Cash Adjustments</i>		
Depreciation expense	\$ 10,328	6,244
Stock-based compensation	1,177,282	899,649
December 2018 Senior Convertible Note - fair value adjustment	340,830	—
December 2018 Senior Convertible Note - extinguishment loss	666,670	—
Senior Secured Note - interest expense added to principal	—	194,570
Senior Secured Note - interest expense accrued	—	201,867
Senior Secured Note - interest expense - amortization of discount	—	1,117,315
Series A and Series A-1 Exchange Offer - March 15, 2018	—	349,796
Series W Warrants Exchange Offer - April 5, 2018	—	766,456
Modification Expense - Unit Purchase Options Exchange Offer - August 22, 2018	—	2,120
Modification Expense - Series Z Warrant - June 1, 2018	—	1,140,995
Change in fair value - Series A Warrants derivative liability	—	96,480
Change in fair value - Series A Convertible Preferred Stock conversion option derivative liability	—	(64,913)
Sub-Total: non-cash adjustments, net	\$ 2,195,110	\$ 4,710,579
<i>Change in Operating Assets and Liabilities</i>		
Prepaid expenses and other current assets	\$ (19,323)	\$ (31,513)
Accounts payable	61,616	771,537
Accrued expenses and other current liabilities	(790,225)	31,327
Sub-Total: Change in operating assets and liabilities, net	\$ (747,932)	\$ 771,351

Investing Activities

Net cash flows used in investing activities was \$25,058 in the nine months ended September 30, 2019 related to the purchases of equipment, including \$22,210 of research and development equipment and \$2,848 of computer equipment and \$23,464 in the nine months ended September 30, 2018 related to the purchases of research and development equipment.

Financing Activities

Net cash flows provided by financing activities in the nine months ended September 30, 2019 of \$5,167,336 included: \$5,378,902 of proceeds net of offering costs from the issue of shares of our common stock in registered offerings; and \$67,436 of proceeds from the issue of share of our common stock under the PAVmed Inc. Employee Stock Purchase Plan ("ESPP"); offset by the (cash) payment of \$279,002 of December 2018 Senior Convertible Note bi-monthly non-installment payments.

Net cash flows provided by financing activities of \$13,498,613 in the nine months ended September 30, 2018 included \$9,208,326 proceeds net of offering costs with respect to the Equity Subscription Rights Offering ("ESRO"); \$4,274,661 of proceeds net of offering costs from the issue of shares of our common stock in an underwritten public offering; \$20,913 of net proceeds from the exercise of Series W Warrants and Series S Warrants; and \$1,812 with respect to the issue of shares of our majority-owned subsidiary Lucid Diagnostics Inc. upon its formation. Additionally, Series A Convertible Preferred Stock dividends of \$7,099 were settled with cash payments.

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

Critical Accounting Policies and Significant Judgments and Estimates

The discussion and analysis of our financial condition and results of operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with 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. Please see our accompanying unaudited condensed consolidated financial statement Note 2, *Summary of Significant Accounting Policies*, of our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for the summary of significant accounting policies. In addition, reference is made to Part I, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation of our Annual Report on Form 10-K for the year ended December 31, 2018 (filed on April 2, 2019) with respect to our Critical Accounting Policies. There have been no other material changes to our critical accounting policies and estimates since our Annual Report on Form 10-K for the year ended December 31, 2018.

Item 4. Controls and procedures

Evaluation of disclosure controls and procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2019, the end of the period covered by this Quarterly Report on Form 10-Q.

Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded our disclosure controls and procedures as of September 30, 2019 have been designed and are functioning effectively to provide reasonable assurance the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. We believe a controls system, no matter how well designed and operated, cannot provide absolute assurance the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance all control issues and instances of fraud, if any, within a company have been detected.

Changes in internal control over financial reporting

No change in our internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 6. Exhibits

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

EXHIBIT INDEX

Exhibit No.	Description
10.1.1	<u>Form of Securities Purchase Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.2	<u>Form of Series A and Series B Secured Convertible Promissory Note between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.3	<u>Form of Amended and Restated Security and Pledge Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.4	<u>Form of Note Purchase Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.5	<u>Form of Amended and Restated Guaranty between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.6	<u>Form of Investor Note between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.7	<u>Form of Master Netting Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.8	<u>Form of Registration Rights Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.9	<u>Form of Voting Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
10.1.10	<u>Form of Amended and Restated Leak-Out Agreement between PAVmed Inc. and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B and Alto Opportunity Master Fund, SPC - Segregated Master Portfolio C⁽¹⁾</u>
31.1	<u>Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002[†]</u>
31.2	<u>Certification of Principal Financial and Accounting Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002[†]</u>
32.1	<u>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[†]</u>
32.2	<u>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[†]</u>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

⁽¹⁾ Incorporated by reference to the Registrant's Current Report on Form 8-K filed on November 4, 2019

[†] Filed herewith

SIGNATURE

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.

Date: November 19, 2019

By: /s/ Dennis M. McGrath

Dennis M. McGrath
President and Chief Financial Officer
(Principal Financial and Accounting Officer)

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.;
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 19, 2019

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

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.;
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 19, 2019

By: /s/ Dennis M. McGrath

Dennis M. McGrath
President and Chief Financial Officer
(Principal Financial and Accounting Officer)

**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. (the "Company") for the quarter ended September 30, 2019 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 19, 2019

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

**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. (the "Company") for the quarter ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Dennis M. McGrath, 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 19, 2019

By: /s/ Dennis M. McGrath

Dennis M. McGrath
President and Chief Financial Officer
(Principal Financial and Accounting Officer)
