UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15 (d)
of the Securities Exchange Act of 1934

For the Quarterly Period Ended September 30, 2017

Commission File Number 0-13839

CAS MEDICAL SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**06-1123096**
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

44 East Industrial Road, Branford, Connecticut 06405
(Address of principal executive offices, including zip code)

(203) 488-6056
(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.
Large Accelerated Filer ☐ Accelerated Filer ☐ Non-Accelerated Filer ☐ Smaller Reporting Company ☒ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant 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 ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: Common Stock, $.004 par value 28,225,697 shares as of November 6, 2017.

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PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CAS Medical Systems, Inc.

Condensed Consolidated Balance Sheets
(Unaudited)

Assets	**September 30, 2017**	**December 31, 2016**
Current assets:		
Cash and cash equivalents	$ 6,289,134	$ 5,488,706
Accounts receivable, net	2,328,755	2,958,551
Inventories	1,542,365	1,373,864
Other current assets	412,791	879,365
Assets associated with discontinued operations	625,996	675,019
Total current assets	11,199,041	11,375,505
Property and equipment:		
Leasehold improvements	151,377	151,377
Equipment at customers	3,492,011	3,762,632
Machinery and equipment	4,552,368	4,829,002
	8,195,756	8,743,011
Accumulated depreciation and amortization	(5,847,066)	(6,182,586)
Property and equipment, net	2,348,690	2,560,425
Intangible and other assets, net	814,529	788,036
Total assets	$ 14,362,260	$ 14,723,966

See accompanying notes.

CAS Medical Systems, Inc.

Condensed Consolidated Balance Sheets
(Unaudited)

Liabilities and Stockholders' Equity	**September 30, 2017**	**December 31, 2016**
Current liabilities:		
Accounts payable	$ 739,740	$ 1,027,911
Accrued expenses	1,761,770	2,201,965
Notes payable	67,009	70,015
Current portion of long-term debt, less unamortized debt issuance costs	1,911,496	840,471
Liabilities associated with discontinued operations	76,083	177,990
Total current liabilities	4,556,098	4,318,352
Deferred gain on sale and leaseback of property	—	91,603
Long-term debt, less current portion and unamortized debt issuance costs	5,705,669	6,580,851
Other long-term liability	320,000	320,000
Total liabilities	10,581,767	11,310,806
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $.001 par value per share, 1,000,000 shares authorized		
Series A convertible preferred stock, 95,500 shares issued and outstanding, liquidation value of $14,831,820 and $14,079,629 at September 30, 2017 and December 31, 2016, respectively	8,802,000	8,802,000
Series A exchangeable preferred stock, 54,500 shares issued and outstanding, liquidation value of $8,464,232 and $8,034,971 at September 30, 2017 and December 31, 2016, respectively	5,135,640	5,135,640
Common stock, $.004 par value per share, 60,000,000 shares authorized, 28,316,697 and 27,428,752 shares issued at September 30, 2017 and December 31, 2016, respectively, including shares held in treasury	113,267	109,715
Common stock held in treasury, at cost - 86,000 shares	(101,480)	(101,480)
Additional paid-in capital	31,781,471	30,557,093
Accumulated deficit	(41,950,405)	(41,089,808)
Total stockholders' equity	3,780,493	3,413,160
Total liabilities and stockholders' equity	$ 14,362,260	$ 14,723,966

See accompanying notes.

CAS Medical Systems, Inc.

Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	**2016**	**2017**	**2016**
Net sales from continuing operations	$ 4,526,251	$ 4,960,752	$ 13,641,661	$ 14,077,333
Cost of sales	1,882,406	2,305,911	6,137,498	6,450,609
Gross profit	2,643,845	2,654,841	7,504,163	7,626,724
Operating expenses:				
Research and development	803,804	813,889	2,448,740	2,549,731
Selling, general and administrative	3,133,200	3,193,183	10,210,614	10,052,049
Total operating expenses	3,937,004	4,007,072	12,659,354	12,601,780
Operating loss	(1,293,159)	(1,352,231)	(5,155,191)	(4,975,056)
Interest expense	274,799	264,082	799,443	785,444
Other income	(124)	(26,699)	(387)	(33,573)
Loss from continuing operations before income taxes	(1,567,834)	(1,589,614)	(5,954,247)	(5,726,927)
Income tax benefit	(1,629,744)	(84,124)	(1,782,777)	(1,442,759)
Income (loss) from continuing operations	61,910	(1,505,490)	(4,171,470)	(4,284,168)
Discontinued operations:				
Income from discontinued operations	268,158	240,355	705,396	1,180,075
Gain on sale of discontinued operations	4,388,254	—	4,388,254	2,942,095
Income tax expense	1,629,744	84,124	1,782,777	1,442,759
Income from discontinued operations	3,026,668	156,231	3,310,873	2,679,411
Net income (loss)	3,088,578	(1,349,259)	(860,597)	(1,604,757)
Preferred stock dividend accretion	400,669	373,807	1,181,453	1,102,245
Net income (loss) applicable to common stockholders	$ 2,687,909	$ (1,723,066)	$ (2,042,050)	$ (2,707,002)
Loss per common share from continuing operations:				
Basic and diluted	$ (0.01)	$ (0.07)	$ (0.20)	$ (0.20)
Income per common share from discontinued operations:				
Basic and diluted	0.11	0.01	0.12	0.10
Per share basic and diluted net income (loss) applicable to common stockholders	$ 0.10	$ (0.06)	$ (0.07)	$ (0.10)
Weighted-average number of common shares outstanding:				
Basic and diluted	27,335,584	26,833,473	27,230,471	26,819,275

See accompanying notes.

CAS Medical Systems, Inc.

Condensed Consolidated Statement of Changes in Stockholders' Equity
For the Nine Months Ended September 30, 2017
(Unaudited)

	Preferred Stock		Common Stock Issued		Common Stock Held in Treasury		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount			
BALANCE, December 31, 2016	150,000	$ 13,937,640	27,428,752	$ 109,715	86,000	$ (101,480)	$ 30,557,093	$ (41,089,808)	$ 3,413,160
Net loss								(860,597)	(860,597)
Common stock issued under stock purchase plan			14,455	58			18,836		18,894
Issuance of common stock to settle accrued liability			390,240	1,561			572,092		573,653
Restricted stock granted			483,250	1,933			(1,933)		—
Stock compensation							635,383		635,383
BALANCE, September 30, 2017	150,000	$ 13,937,640	28,316,697	$ 113,267	86,000	$ (101,480)	$ 31,781,471	$ (41,950,405)	$ 3,780,493

See accompanying notes.

CAS Medical Systems, Inc.

Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Nine Months Ended September 30,	
	2017	**2016**
OPERATING ACTIVITIES:		
Net loss	$ (860,597)	$ (1,604,757)
Income from discontinued operations	3,310,873	2,679,411
Loss from continuing operations	(4,171,470)	(4,284,168)
Adjustments to reconcile loss from continuing operations to net cash used in operating activities of continuing operations:		
Depreciation and amortization	769,037	753,526
Amortization of debt issuance costs and discounts	195,844	280,188
Deferred income taxes	(1,782,777)	(1,442,759)
Provision for doubtful accounts	286,567	—
Stock compensation	635,547	582,789
Impairment of capitalized costs	—	56,857
Amortization of gain on sale and leaseback of property	(91,603)	(100,978)
Changes in operating assets and liabilities:		
Accounts receivable	343,229	(516,047)
Notes and other receivables	—	(315,361)
Inventories	(168,501)	284,854
Other current assets	565,304	(99,968)
Accounts payable and accrued expenses	(154,714)	(197,628)
Net cash used in operating activities of continuing operations	(3,573,537)	(4,998,695)
INVESTING ACTIVITIES:		
Expenditures for property and equipment	(527,513)	(1,024,647)
Proceeds from sale of discontinued operations	4,527,206	2,942,095
Additions to intangible assets	(52,264)	(70,560)
Net cash provided by investing activities of continuing operations	3,947,429	1,846,888
FINANCING ACTIVITIES:		
Proceeds from long-term debt	—	8,000,000
Repayment of long-term debt	—	(7,280,000)
Payment of final term loan fee	—	(218,000)
Deferred financing costs	—	(144,030)
Proceeds from line-of-credit	1,000,000	—
Repayment of line-of-credit	(1,000,000)	—
Repayments of notes payable	(157,716)	(171,197)
Proceeds from issuance of common stock	18,894	42,421
Net cash (used in) provided by financing activities of continuing operations	(138,822)	229,194
Net increase (decrease) in cash and cash equivalents from continuing operations	235,070	(2,922,613)
CASH FLOWS FROM DISCONTINUED OPERATIONS:		
Cash provided by operating activities of discontinued operations	565,358	2,102,498
Net cash provided by discontinued operations	565,358	2,102,498
Net change in cash and cash equivalents	800,428	(820,115)
Cash and cash equivalents, beginning of period	5,488,706	7,528,292
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 6,289,134	$ 6,708,177
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid during the period for interest	$ 601,520	$ 443,428
Accrued liability settled with common stock	$ 573,653	$ —
Insurance premiums funded with note payable	$ 154,710	$ 156,616
End-of-term fee payable to lenders	$ —	$ 320,000
Warrants issued to lenders	$ —	$ 92,906

See accompanying notes.

(1) The Company

CAS Medical Systems, Inc. ("CASMED" or the "Company") is a medical technology company that develops, manufactures, and markets non-invasive patient monitoring products that are consistent with our vision: that no patient is harmed by undetected tissue hypoxia. Our principal products are the FORE-SIGHT ELITE® and FORE-SIGHT® brand tissue oximeters and sensors. With a simple non-invasive sensor applied to the skin, these products alert clinicians to the oxygenation levels of a patient's brain or other body tissue during medical procedures to avoid harm caused by insufficient oxygen, or hypoxia. The FORE-SIGHT product line accounts for 96% of our sales from continuing operations for the nine months ended September 30, 2017. We also perform service repairs that are categorized as Service and Other.

Consistent with its strategy to focus on the tissue oximetry market opportunity, the Company has divested its non-strategic product lines. Most recently, on July 25, 2017, the Company entered into an agreement pursuant to which it sold certain assets related to its non-invasive blood pressure ("NIBP") monitoring product line. With that divestiture, the Company has completed its multi-year transition from a lower-margin capital equipment business to a high-margin medical disposables business where sales of its disposable FORE-SIGHT sensors accounted for 88% of net sales from continuing operations for the nine months ended September 30, 2017.

(2) Basis of Presentation

The condensed consolidated financial statements included herein have been prepared, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and disclosures included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to such rules and regulations. These condensed consolidated financial statements should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report filed on Form 10-K for the year ended December 31, 2016. The condensed consolidated balance sheet as of December 31, 2016, was derived from the audited financial statements.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of sales and expenses during the reporting period. The Company's critical accounting policies and estimates include those related to revenue recognition, the valuations of inventories and deferred income tax assets, measuring stock compensation and warranty costs, determining useful lives of intangible assets, and making asset impairment valuations. The Company bases its estimates on historical experience and on various other assumptions that management believes to be reasonable under the circumstances. Actual results could differ from those estimates. In the opinion of the Company, all adjustments (consisting of normal recurring adjustments) necessary to present fairly the consolidated financial position of the Company and its consolidated results of operations and cash flows have been included in the accompanying financial statements. The results of operations for interim periods are not necessarily indicative of the expected results for the full year.

The Company has reclassified certain product line assets which were sold in prior-year periods to discontinued operations – see Note (3) below. Additionally, on July 25, 2017, the Company sold its NIBP product line. Management has evaluated the criteria for reporting the discontinued operations under Accounting Standards Update (ASU) 2014-08, *Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity*. Accordingly, the consolidated financial statements for all periods reported reflect those results as discontinued, and all assets and liabilities related to the divested product lines and held as of September 30, 2017, and December 31, 2016, are stated as assets and liabilities associated with discontinued operations.

On June 30, 2016, the Company consummated a term loan agreement in the amount of $8,000,000 with two lenders, as further described in Note (5), which contains a 12-month interest-only period and a further six-month extension should the Company meet certain sales targets for the 12 months ended June 30, 2017. The Company has exceeded those targets. The Company's credit facility, as amended, includes a revolving loan agreement with a maximum borrowing level of $2,500,000. There was no outstanding balance under the revolving loan as of September 30, 2017.

As of September 30, 2017, the Company had cash and cash equivalents plus available borrowings under its revolving loan with its lender totaling $8,283,000. On July 25, 2017, the Company received $4,500,000 of cash proceeds pursuant to the agreement referred to in Note (3) below. The Company intends to use the proceeds from the transaction for general working capital purposes. Management believes its funds as of this date are sufficient to support the Company's operations through at least November 15, 2018. The Company expects to continue to use cash from operations during these periods. The Company may seek changes in its debt instruments, reductions in planned operating expenses, and/or may seek to raise additional capital to support its operations should the need arise. Management believes that it can execute on one or more of these initiatives or obtain additional financing; however, there can be no assurance that such actions can be consummated or additional financing be obtained on acceptable terms or at all.

(3) Discontinued Operations

On July 25, 2017, the Company entered into an agreement pursuant to which it sold assets related to its NIBP technology product line in exchange for $4,500,000 in cash at closing and an additional payment for the purchase of inventory following a short transition services period, which concluded during September 2017. The final inventory purchased by the buyer was $86,000. The agreement also provides for an earn-out payment not to exceed $2,000,000 following a 24-month period ending June 30, 2019.

On March 28, 2016, the Company consummated an agreement under which it sold certain assets related to its neonatal intensive care disposable product line for $3,350,000, including $3,035,000 in cash at closing after deductions of $100,000 for funds held in escrow for 12 months following the closing and $215,000 for inventory to be purchased following a transition services agreement which was effectively concluded at December 31, 2016. During March 2017, the funds in escrow were paid to the Company while payments on the inventory have been scheduled to be made through year-end 2017.

On October 26, 2015, the Company entered into an agreement pursuant to which it sold assets related to its 740 SELECT® vital signs monitoring product line in exchange for $220,000 in cash at closing and a one-year, interest-bearing promissory note in the principal amount of $329,967. The promissory note was paid in full as of December 31, 2016. The agreement also provides for royalty payments to the Company for sales of 740 SELECT products during the three-year period following the closing.

The following table includes those assets and liabilities associated with discontinued operations in the consolidated balance sheets as of the periods below:

	September 30, 2017	December 31, 2016
Accounts receivable	$ 568,015	$ 449,198
Non-trade receivable	57,981	—
Inventories	—	221,804
Property and equipment, net	—	1,082
Intangible assets	—	2,935
Total assets associated with discontinued operations	$ 625,996	$ 675,019
Accounts payable	$ 1,083	$ 69,720
Accrued expenses	75,000	108,270
Total liabilities associated with discontinued operations	$ 76,083	$ 177,990

The following table represents the financial results of the discontinued operations for the three and nine months ended September 30th:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net sales	$ 862,363	$ 819,251	$ 2,147,741	$ 3,463,584
Cost of sales	622,847	538,273	1,380,088	2,129,895
Gross profit	239,516	280,978	767,653	1,333,689
Operating expenses	(28,642)	40,623	62,257	153,614
Income from discontinued operations before income taxes	268,158	240,355	705,396	1,180,075
Gain on sale of discontinued operations	4,388,254	—	4,388,254	2,942,095
Income tax expense	1,629,744	84,124	1,782,777	1,442,759
Income from discontinued operations	$ 3,026,668	$ 156,231	$ 3,310,873	$ 2,679,411

(4) Inventories, Property and Equipment, and Intangible and Other Assets

Inventories consist of:

	September 30, 2017	December 31, 2016
Raw materials	$ 898,164	$ 839,694
Work-in-process	4,393	23,252
Finished goods	639,808	510,918
Total	$ 1,542,365	$ 1,373,864

Property and equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets which range from two to five years for machinery and equipment. Leasehold improvements are amortized over the life of the improvement or the lease term, whichever is shorter. Maintenance and repairs are charged to expense when incurred. Property and equipment includes FORE-SIGHT cerebral oximetry monitors primarily located at customer sites within the United States. Such equipment, categorized as "Equipment at Customers", is typically held under a no-cost program whereby customers purchase disposable sensors for use with the Company's FORE-SIGHT equipment. Under this program, the Company retains title to the monitors shipped to its customers and amortizes the monitors using the straight-line method over five years.

Intangible assets consist of patents issued, patents pending, trademarks, and purchased technology which are recorded at cost. Patents are amortized on a straight-line basis over 20 years. Capitalized costs are amortized over their estimated useful lives.

Intangible and other assets consist of the following:

	September 30, 2017	December 31, 2016
Patents, trademarks and other assets	$ 718,630	$ 651,631
Patents pending	323,902	335,702
	1,042,532	987,333
Accumulated amortization	(228,003)	(199,297)
Total	$ 814,529	$ 788,036

Amortization expense of intangible and other assets for the nine months ended September 30, 2017, was $28,706. Estimated amortization expense for the calendar year 2017 is $38,492. Expected amortization expense of intangible and other assets for the next five calendar years and thereafter follows:

2018	$	35,500
2019		31,500
2020		31,000
2021		30,700
2022		30,000
Thereafter		575,800
	$	734,500

The Company reviews its intangibles and other assets for impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company believes that the carrying amounts of its remaining long-lived assets are fully recoverable.

(5) Financing Arrangements

Debt Agreements

On June 30, 2016, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Solar Capital Ltd. and Western Alliance Bank (collectively, the "Lenders"). Pursuant to the Loan Agreement, the Lenders have provided the Company with a 48-month secured term loan in the amount of $8,000,000 (the "Term Loan") and a Revolving Loan in the maximum amount of $2,500,000 (the "Revolver"). The Revolver, as amended, expires on July 1, 2019, and the Term Loan matures on July 1, 2020. The obligations under the Loan Agreement are secured by a lien on substantially all assets of the Company.

The Term Loan bears interest at a floating rate equal to 8.75% plus the 30-day LIBOR rate (9.99% as of September 30, 2017). Under the Term Loan, 30 equal payments of $266,667 are scheduled to commence on February 1, 2018, with one final payment in an amount equal to the remaining principal balance on the final maturity date. Principal payments under the Term Loan have been deferred an additional six months, until February 1, 2018, as the Company has reached a specified product line sales target for the 12 months ended June 30, 2017.

The Loan Agreement was amended on November 3, 2017, extending the maturity date of the Revolver to July 1, 2019 from July 1, 2018. The amendment also modifies the rate on the unused facility fee of the Revolver from 0.3% to 1.0%.

Revolver advances will bear interest at a floating rate equal to 2.5% plus the higher of 3.5% per annum or a specified prime rate (6.75% as of September 30, 2017). Maximum borrowings under the Revolver are based upon the Company's eligible accounts receivable as defined in the Loan Agreement. There was no outstanding balance under the Revolver as of September 30, 2017, and the amount available for borrowing at that date was $1,994,000, according to the borrowing formula contained with the Loan Agreement and subject to other terms and conditions.

The Company has the right to prepay the loans under the Loan Agreement in full at any time; however, if the Term Loan is prepaid prior to maturity, an additional fee of 1% of the Term Loan amount is due. Amounts prepaid under the Term Loan may not be re-borrowed. Upon repayment of the Term Loan at any time, the Lenders are entitled to an additional fee equal to 4% of the Term Loan amount.

The Loan Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements, and compliance with applicable laws and regulations. Further, the Loan Agreement contains customary negative covenants limiting the ability of the Company and its subsidiaries, among other things, to grant liens on the pledged collateral, incur additional indebtedness, make certain investments and acquisitions, and dispose of assets outside the ordinary course of business. The Loan Agreement also contains a financial covenant requiring the Company to maintain a continuing level of cash plus available borrowing capacity based on a formula. Management believes the Company was in compliance with all covenants as of September 30, 2017.

Upon an event of default, the Lenders may declare all outstanding principal and accrued but unpaid interest under the Loan Agreement immediately due and payable and may exercise the other rights and remedies provided under the Loan Agreement. The events of default under the Loan Agreement include payment defaults, breaches of covenants or representations and warranties, a material adverse change, certain adverse regulatory events, specified change of control events, and bankruptcy events.

In connection with the Loan Agreement, on June 30, 2016, the Company issued warrants (the "Warrants") to the Lenders, which provide for the right to purchase an aggregate of 64,655 shares of the Company's common stock for a ten-year period, expiring on June 30, 2026, at an exercise price of $1.856 per share of which 48,491 shares may be purchased by Solar Capital Ltd. ("Solar") and 16,164 shares may be purchased by Western Alliance Bank.

The amount of shares issuable pursuant to the Warrants and the exercise price thereof are subject to adjustment only in the event of stock splits, subdivisions, reclassifications, exchanges, combinations, and similar transactions. The Warrants also contain a cashless exercise provision.

The shares associated with the Warrants were fully vested at the time of issuance. The value of the Warrants were estimated on the date of grant to be $1.44 per share using the Black-Scholes option pricing model, assuming a weighted-average expected stock price volatility of 73.4%, an expected warrant life of ten years, an average risk-free interest rate of 1.48%, and a 0.0% average dividend yield. The value of the Warrants of $92,906, as calculated above, has been recorded as a debt discount and is being recognized as interest expense over the 48-month term of the Loan Agreement.

The outstanding balance of the Company's term loan is stated for the following periods:

	September 30, 2017			December 31, 2016		
	Principal	Unamortized Debt Issuance Costs and Discounts	Debt, Net	Principal	Unamortized Debt Issuance Costs and Discounts	Debt, Net
Balance of term loan	$ 8,000,000	$ 382,835	$ 7,617,165	$ 8,000,000	$ 578,678	$ 7,421,322
Less current portion	2,133,333	221,837	1,911,496	1,111,111	270,640	840,471
Long-term portion	$ 5,866,667	$ 160,998	$ 5,705,669	$ 6,888,889	$ 308,038	$ 6,580,851

The Company incurred debt issuance costs and discounts of $556,936 associated with the Loan Agreement, including $320,000 of accrued fees payable upon repayment of the prior term loan, $92,906 pertaining to the Warrants, and other legal and brokerage costs. Unamortized debt issuance costs of $104,246 at June 30, 2016, pertaining to the Company's prior revolving credit agreement with Solar, were recorded as interest expense corresponding with the termination of that agreement. The remaining $165,514 of unamortized debt issuance costs and discounts together with the $556,936 of new deferred costs, aggregating $722,450, will be amortized through July 1, 2019 and June 30, 2020, the maturity dates of the Revolver and Term Loan, respectively. As a result of the debt issuance costs, the effective rate of the Term Loan was 13.0% at September 30, 2017.

(6) Income (Loss) per Common Share Applicable to Common Stockholders

Basic loss per share is calculated by dividing net loss applicable to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted loss per share reflects the potential dilution that could occur if common stock equivalents, such as unvested restricted common shares, outstanding warrants and options, or convertible preferred stock, were exercised or converted into common stock. Therefore, for each period for which a loss is reported, diluted loss per share is equal to basic loss per share because the effect of including such common stock equivalents or other securities would have been anti-dilutive. Although the Company generated net income applicable to common stockholders for the three months ended September 30, 2017, the Company incurred a loss from continuing operations for the same period. As such, the Company has excluded potentially dilutive shares from the calculation of income per common share applicable to common stockholders.

At September 30, 2017, stock options and warrants to purchase 3,252,000 and 318,125 shares of common stock, respectively, were excluded from the diluted earnings per share calculation as they would have been anti-dilutive. On an as-converted basis, 9,751,382 shares of common stock pertaining to the private placement of 150,000 shares of Series A Preferred Stock were also excluded as they would have been anti-dilutive.

(7) Stock Compensation Expense and Share-based Payment Plans

Stock compensation expense was $209,608 and $190,493 and $635,383 and $583,763 for the three- and nine-month periods ended September 30, 2017 and 2016, respectively.

As of September 30, 2017, the unrecognized stock-based compensation cost related to stock option awards and unvested restricted common stock was $1,422,000. Such amount, net of estimated forfeitures, will be recognized in operations through the third quarter of 2021.

The following table summarizes the Company's stock option information as of and for the nine-month period ended September 30, 2017:

	Option Shares	Weighted-Average Exercise Price	Aggregate Intrinsic Value (1)	Weighted-Average Contractual Life Remaining in Years
Outstanding at December 31, 2016	3,229,500	$ 1.97	$ 82,250	6.3
Granted	115,000	1.34		
Cancelled or expired	(92,500)	1.80		
Exercised	—	—	—	
Outstanding at September 30, 2017	3,252,000	1.95	—	5.7
Exercisable at September 30, 2017	2,381,625	$ 2.08	$ —	4.9
Vested and expected to vest at September 30, 2017	3,225,893	$ 1.96	$ —	5.7

(1) The intrinsic value of a stock option is the amount by which the market value of the underlying stock, as of the applicable date, exceeds the option exercise price.

The exercise period for all outstanding stock options may not exceed ten years from the date of grant. Stock options granted to employees typically vest over a four-year period. The Company attributes stock-based compensation cost to operations using the straight-line method over the applicable vesting period.

On June 22, 2016, the Company's stockholders approved an amendment to the CAS Medical Systems, Inc. 2011 Equity Incentive Plan (the "Plan") which increased the maximum number of shares that can be issued under the Plan by 1,500,000 to 4,500,000. Awards that may be granted under the Plan include options, restricted stock and restricted stock units, and other stock-based awards. In addition, the sublimit of awards of restricted stock and restricted stock units was increased from 500,000 to 1,250,000. The purposes of the Plan are to make available to our key employees and directors certain compensatory arrangements related to growth in value of our stock so as to generate an increased incentive to contribute to the Company's financial success and prosperity; to enhance the Company's ability to attract and retain exceptionally qualified individuals whose efforts can affect the Company's financial growth and profitability; and to align, in general, the interests of employees and directors with the interests of our stockholders. As of September 30, 2017, there remained 741,595 total shares available for issuance under the Plan, including a sublimit of 305,286 shares available for restricted stock and restricted stock units.

On January 9, 2017, members of the management team were granted 413,250 shares of restricted common stock which vest 25% per year on each anniversary of the grant date, and 75,000 restricted common shares were granted to outside members of the Board of Directors, which vest 50% per year on each anniversary of the grant date.

During 2017, the Company granted non-qualified stock options to employees to purchase 115,000 shares of common stock at a weighted-average exercise price of $1.34. The stock options were granted at exercise prices based upon the Nasdaq official closing price on the date of each grant. The fair values of the options were estimated on the grant dates using the Black-Scholes option pricing model. Similar to other option pricing models, the Black-Scholes model requires the input of highly subjective assumptions which may materially affect the estimated fair value of the Company's stock options. The fair value of the stock options granted was $0.72 and assumed a weighted-average expected stock volatility of 54.9%, a weighted-average expected option term of 6.25 years, an average risk-free interest rate of 2.09%, and a 0.0% dividend yield. The risk-free interest rate approximated U.S. Treasury yields in effect at the time of the grant. The expected life of the stock option was determined using historical data adjusted for the estimated exercise dates of unexercised options. Volatility was determined using both current and historical implied volatilities of the underlying stock which are obtained from public data sources.

As of September 30, 2017, there were 894,250 outstanding restricted shares at a weighted-average fair value of $1.70 per share. Included in this total are 150,000 shares of restricted common stock issued to the Company's Chief Executive Officer during August 2010. The vesting of these shares granted to the Company's CEO is based upon certain stock price performance criteria that has not yet been met. The fair value of the outstanding restricted common shares has been calculated based upon the market value of the common stock as of the date of issuance. Restricted stock granted to employees typically vests over a period of not less than three years, while restricted stock granted to outside members of the Board of Directors typically vests over a period of not more than two years from date of grant.

A summary of the unvested restricted shares of common stock outstanding follows:

	Nine Months Ended September 30, 2017	Weighted-Average Grant Date Fair-Value
Outstanding at beginning of period	418,500	$ 1.80
Granted	488,250	1.62
Cancelled	(5,000)	1.62
Vested	(7,500)	1.62
Outstanding at end of period	894,250	$ 1.70

On July 31, 2017, a warrant granted to a former lender to purchase 133,000 shares of common stock expired. Warrants to purchase 318,125 shares of common stock at a weighted-average exercise price of $1.57 per share were outstanding as of September 30, 2017. The warrants have an exercise price range of $0.38 to $1.98 per share, and warrants underlying 109,000 shares of common stock have no expiration date.

On March 10, 2017, members of the management team, in lieu of cash payments, were granted 390,240 shares of vested common stock in connection with the achievement of certain 2016 management incentive targets. The shares were valued at $1.47 each, based upon the Nasdaq official closing price of the Company's common stock on the date of issuance.

(8) Preferred Stock

As of September 30, 2017, 95,500 shares of Series A Convertible Preferred Stock and 54,500 shares of Series A Exchangeable Preferred Stock, issued in connection with a 2011 private placement (collectively, the "Preferred Stock"), are outstanding. The Preferred Stock has a par value $0.001 per share and is convertible into common stock of the Company at a price of $2.389 per share. The Company can force conversion of all of the outstanding Preferred Stock if the closing price of its common stock meets certain share price, trading volume requirements, and other conditions. The stated value ($100 per share) of the Series A Preferred Stock accretes at an annual rate of 7% compounded quarterly. While such accretion may be paid in cash at the Company's option, the Company's current loan agreement prohibits the payment of cash dividends. As of September 30, 2017, dividend accretion of $8,296,053 had accumulated on the Preferred Stock. The Preferred Stock is entitled to a liquidation preference equal to the greater of 100% of the total accreted value for each share of Preferred Stock, outstanding on the date of a liquidation, plus all accrued and unpaid dividends, or the amount a holder would have been entitled to had the holder converted the shares of Preferred Stock into common stock immediately prior to the liquidation. Accordingly, based upon the liquidation value of the Preferred Stock at September 30, 2017, there were 9,751,382 shares of common stock issuable upon conversion of the Preferred Stock. The Preferred Stock votes together with the common stock as if converted on the original date of issuance. Holders of Preferred Stock are entitled to purchase their pro rata share of additional stock issuances in certain future financings.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Certain statements included in this report, including without limitation statements in Management's Discussion and Analysis of Financial Condition and Results of Operations, which are not historical facts, are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, both as amended. These forward-looking statements represent the Company's current expectations regarding future events. The Company cautions that such statements are qualified by important factors that could cause actual results to differ materially from expected results which may be contained in the forward-looking statements. All forward-looking statements involve risks and uncertainties, including, but not limited to, the following: regulations and other economic and political factors which affect the Company's ability to market its products internationally, changes in economic conditions that adversely affect demand for the Company's products, potential liquidity constraints, new product introductions or other actions taken by the Company's competitors, such as limiting market access for the Company's products through exclusive contracting arrangements, increased price competition, foreign currency fluctuations, rapid technological changes, dependence upon significant customers, availability and cost of components for the Company's products, the impact of any product liability or other adverse litigation, marketplace acceptance for the Company's new products, FDA and other governmental regulatory and enforcement actions, changes in reimbursement levels from third-party payers, changes to federal research and development grant programs utilized by the Company, and other factors described in greater detail in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Management Summary

We believe that our FORE-SIGHT tissue oximetry products place CASMED in a unique position to expand the clinical application for monitoring tissue oxygenation. Standard non-invasive parameters, such as pulse oximetry and blood pressure, provide only surrogate markers of tissue oxygen delivery. The indirect nature of these parameters forces clinicians to infer the adequacy of oxygenation in vital organs, including the brain, during medical procedures. However, data convincingly shows that clinician inferences of cerebral oxygenation during medical procedures often does not correlate with actual tissue oxygenation levels and that potentially dangerously low levels of cerebral oxygenation often go unrecognized, correlating to high levels of patient harm. Therefore, direct monitoring of cerebral oxygenation with FORE-SIGHT oximeters provides a unique and powerful tool that allows clinicians to recognize and treat potentially dangerous tissue hypoxia to avoid adverse clinical outcomes.

As clinician education and experience demonstrates that use of cerebral and tissue oximetry improves patient care, the market for these monitors should continue to expand at attractive rates as the industry penetrates what we believe is more than a $500-million addressable market. We believe the FORE-SIGHT tissue oximeter provides clinicians the most accurate and reliable readings and is well-positioned to compete in that expanding market.

With the divestiture of the Company's last legacy product line on July 25, 2017, CASMED can now focus singularly on its FORE-SIGHT Tissue oximetry line of products. Along with a recently expanded and upgraded U.S. direct sales force, we believe the Company is well-positioned to capitalize on the market for tissue oximetry as the U.S. sales force continues to gain tenure. While the third-quarter decline in FORE-SIGHT sales over the prior-year quarter is inconsistent with our prior FORE-SIGHT growth rate, we believe the decline is a product of a few unique account losses in late-2016 and early-2017; the discontinuity and disruption of a broad sales force transition, whereby the majority of the U.S. field sales organization had fewer than 12 months of tenure at the start of the third quarter; and a softness in international sales, compared to a strong prior-year period. As CASMED continues to execute on its sales plans and these factors mitigate, we expect to return to growth in the coming quarters.

Results of Operations

The following table provides information with respect to net sales by major category for the three months ended September 30th:

Total Net Sales from Continuing Operations ($000's)

	Three Months Ended September 30, 2017	Three Months Ended September 30, 2016	Increase / (Decrease)	% Change
Tissue Oximetry:				
Sensors	$ 3,902	$ 4,068	$ (166)	(4%)
Monitors and Accessories	473	720	(247)	(34%)
	4,375	4,788	(413)	(9%)
Service and Other	151	173	(22)	(13%)
	$ 4,526	$ 4,961	$ (435)	(9%)
Domestic Sales	$ 3,971	$ 3,913	$ 58	1%
International Sales	555	1,048	(493)	(47%)
	$ 4,526	$ 4,961	$ (435)	(9%)

Total sales from continuing operations were $4,526,000 for the three months ended September 30, 2017, a decrease of $435,000, or 9%, from sales of $4,961,000 for the same three months of the prior year. Worldwide tissue oximetry product sales of $4,375,000 for the three months ended September 30, 2017, were $413,000, or 9%, below the $4,788,000 reported for the same period in the prior year. Service and other sales were $151,000 for the three months ended September 30, 2017, compared to $173,000 for the same prior-year period.

Worldwide sensor sales decreased 4%, or $166,000, to $3,902,000, and monitor sales decreased $247,000, or 34%, to $473,000 for the three months ended September 30, 2017, compared to the same period of the prior year. The Company shipped a net of 73 FORE-SIGHT monitors to customers in the third quarter, bringing the Company's worldwide net cumulative shipments of oximetry monitors, as of September 30, 2017, to 2,279 units, an increase of 14% above the net cumulative shipments of 2,000 units as of September 30, 2016, including the U.S. installed base which expanded to 1,238, a 15% increase over the base at September 30, 2016.

Sales of all products to U.S. customers accounted for $3,971,000, or 88%, of the total sales reported for the three months ended September 30, 2017, an increase of $58,000, or 1%, from the $3,913,000 of U.S. sales reported for the three months ended September 30, 2016. U.S. tissue oximetry product sales increased 2%, or $81,000, to $3,844,000, due to an increase of $104,000 in monitor sales, which were partially offset by a $22,000, or 1%, decrease in disposable sensor sales.

International sales of all products accounted for $555,000, or 12%, of the total sales reported for the three months ended September 30, 2017, a decrease of $493,000, or 47%, from the $1,048,000 reported for the same period of the prior year. The decrease was primarily caused by $351,000 of lower sales of tissue oximetry monitors and $143,000 of lower sensor sales.

The following table provides information with respect to revenues by major category for the nine months ended September 30th:

Total Net Sales from Continuing Operations ($000's)

	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016	Increase / (Decrease)	% Change
Tissue Oximetry:				
Sensors	$ 12,045	$ 11,853	$ 192	2%
Monitors and Accessories	1,062	1,695	(633)	(37%)
	13,107	13,548	(441)	(3%)
Service and Other	535	529	6	1%
	$ 13,642	$ 14,077	$ (435)	(3%)
Domestic Sales	$ 11,654	$ 11,513	$ 141	1%
International Sales	1,988	2,564	(576)	(22%)
	$ 13,642	$ 14,077	$ (435)	(3%)

Tissue oximetry product sales of $13,107,000 for the nine months ended September 30, 2017, were $441,000, or 3% below the $13,548,000 reported for the same period in the prior year. Service and other sales were $535,000 for the nine months ended September 30, 2017, a 1% or $6,000 increase over the same period of the prior year.

Worldwide tissue oximetry sensor sales were $12,045,000, an increase of $192,000, or 2%, over the first nine months of 2016. U.S. disposable sensor sales accounted were responsible for the entire increase. Worldwide monitor sales were $1,062,000 for the nine months ended September 30, 2017, a decrease of $633,000, or 37%, from the $1,695,000 of worldwide monitor sales for the prior-year period primarily due to declines in international oximetry monitor sales.

Sales of all products to the U.S. market accounted for $11,654,000, or 85%, of the total sales of $13,642,000 reported for the nine months ended September 30, 2017, an increase of $141,000, or 1%, over the $11,513,000 of U.S. sales reported for the nine months ended September 30, 2016. U.S. tissue oximetry sales accounted for $11,209,000, or 96%, of the total U.S. sales and increased $130,000, or 1%, over the prior-year period. U.S. service and other sales accounted for the remaining $445,000 of sales this period, and increased $11,000 over the prior nine-month period. Disposable sensor sales accounted for $10,497,000, or 90%, of the total U.S. tissue oximetry sales of $11,209,000 for the nine months ended September 30, 2017, reflecting an increase of $194,000, or 2%, of the prior nine-month period of $10,303,000. Those sensor sales were slightly offset by decreases of $64,000 in U.S. monitor sales.

International sales of all products accounted for $1,988,000, or 15%, of the total sales reported for the nine months ended September 30, 2017, a decrease of $576,000, or 22%, from the $2,564,000 reported for the same period of the prior year. Tissue oximetry sales accounted for $1,898,000, or 95%, of the total international sales and decreased $571,000, or 23%, from the prior nine-month period. Tissue oximetry monitor sales were responsible for the decrease in total international oximetry sales as disposable sensor sales were essentially unchanged from the prior-year period. Service and other sales accounted for the remaining $90,000 of international sales and decreased $5,000 from the prior nine-month period.

Gross profit was $2,644,000, or 58.4% of sales, for the three months ended September 30, 2017, compared to $2,655,000, or 53.5% of sales, for the three months ended September 30, 2016. Gross profit was $7,504,000, or 55.0% of sales, for the nine months ended September 30, 2017, compared to $7,627,000, or 54.2% of sales, for the same period of the prior year. The improvement in gross profit margin, particularly in the three months ended September 30, 2017, was related to lower disposable sensor costs, lower manufacturing and service repair overhead, and lower manufacturing variances. Management continues to focus its efforts on reducing costs and improving efficiencies as its divestitures of non-strategic product lines have been completed.

Operating expenses for the three months ended September 30, 2017, decreased $70,000, or 2%, to $3,937,000, from $4,007,000 for the three months ended September 30, 2016. Decreases in research and development ("R&D") and general and administrative ("G&A") costs were partially offset by increases in selling expenses. Operating expenses for the first nine months of 2017 increased $57,000 to $12,659,000 from $12,602,000 for the same period of the prior year. Increases in sales, general, and administrative ("S,G&A") expenses were partially offset by lower R&D spending.

R&D expenses decreased $10,000, or 1%, for the three months ended September 30, 2017, to $804,000, from $814,000 for the three months ended September 30, 2016, primarily as a result of decreased project-related costs. R&D expenses decreased $101,000, or 4%, to $2,449,000 for the nine months ended September 30, 2017, compared to $2,550,000 for the same period of the prior year, due to lower clinical evaluation costs and salaries and related fringe benefits partially offset by increased project development expenses.

S,G&A expenses of $3,133,000 for the three months ended September 30, 2017, were $60,000 less than the $3,193,000 of S,G&A expenses incurred for the same period of the prior year. Lower G&A expenses, including outside professional services and incentive costs, were partially offset by an unfavorable comparative effect of a medical device excise tax refund received in 2016. Selling expenses also increased slightly over the prior-year period due to increased salaries and related benefits and travel and entertainment. S,G&A expenses for the nine months ended September 30, 2017, were $10,211,000, compared to $10,052,000 for the nine months ended September 30, 2016, an increase of $159,000, or 2%. The increase was caused by higher selling expenses, including salaries and related benefits and increased sales support costs, partially offset by lower sales commissions and reduced marketing expenditures.

Interest expense of $275,000 and $799,000 for the three- and nine-month periods ended September 30, 2017, reflected the borrowing costs associated with the Company's bank loans, including interest and amortization of debt issuance costs. Interest expense for the three months ended September 30, 2016, included charges related to the refinancing of the Company's bank loan agreements.

The Company does not expect to generate taxable income for its 2017 fiscal year. Income tax benefits that may be generated during 2017 would be offset by a deferred income tax asset valuation allowance. Management established the valuation allowance as a result of cumulative pre-tax losses and its estimates of future taxable income. Management has continued to perform the required analysis regarding the realization of our deferred income tax assets, concluding that a full valuation allowance is warranted.

Financial Condition, Liquidity and Capital Resources

As of September 30, 2017, the Company's cash and cash equivalents totaled $6,289,000, compared to $5,489,000 as of December 31, 2016. Working capital decreased $414,000 to $6,643,000 as of September 30, 2017, from $7,057,000 as of December 31, 2016. The net proceeds of $4,388,000 from the sale of the Company's NIBP product line on July 25, 2017, provided additional working capital.

Cash used in operating activities of continuing operations for the nine months ended September 30, 2017, was $3,574,000, compared to cash used in operating activities of continuing operations of $4,999,000 for the same period in the prior year. The decrease in cash used from operations of $1,425,000 resulted from favorable working capital changes, including accounts, notes, and other receivables and other current assets.

Cash provided by investing activities of continuing operations was $3,947,000 for the nine months ended September 30, 2017, compared to cash provided by investing activities of continuing operations of $1,847,000 for the same period in the prior year. The nine months ended September 30, 2017, includes $4,527,000 of proceeds from the sales of discontinued operations which is primarily the result of the $4,500,000 of proceeds from the July 2017 divestiture. The prior-year proceeds of $2,942,000 were associated with the Company's divestiture of its neonatal intensive care disposables product line. Expenditures for property and equipment were also significantly lower for the first nine months of 2017, reflecting lower requirements for customer FORE-SIGHT monitor placements.

Cash used in financing activities of continuing operations was $139,000 for the nine months ended September 30, 2017, primarily associated with repayments of insurance notes payable. Cash provided by financing activities of $229,000 for the nine months ended September 30, 2016, largely reflects the Company's refinancing of its bank loans partially offset by repayments of insurance notes payable.

On June 30, 2016, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Solar Capital Ltd. and Western Alliance Bank (collectively, the "Lenders"). Pursuant to the Loan Agreement, the Lenders provided the Company with a 48-month secured term loan in the amount of $8,000,000 (the "Term Loan") and a revolving loan in the maximum amount of $2,500,000 (the "Revolver"). The Revolver, as amended, expires on July 1, 2019, and the Term Loan matures on July 1, 2020. The obligations under the Loan Agreement are secured by a lien on substantially all assets of the Company.

The Term Loan bears interest at a floating rate equal to 8.75% plus the 30-day LIBOR rate (9.99% as of September 30, 2017). Principal payments under the Term Loan have been deferred until February 1, 2018, as the Company has reached a specified product line sales target for the 12 months ended June 30, 2017. Under the Term Loan, 30 equal payments of $266,667 are scheduled to commence on February 1, 2018, with one final payment in an amount equal to the remaining principal balance on the final maturity date.

The Loan Agreement was amended on November 3, 2017, extending the maturity date of the Revolver to July 1, 2019 from July 1, 2018. The amendment also modifies the rate on the unused facility fee of the Revolver from 0.3% to 1.0%.

Revolver advances will bear interest at a floating rate equal to 2.5% plus the higher of 3.5% per annum or a specified prime rate (6.75% as of September 30, 2017). Maximum borrowings under the Revolver are based upon the Company's eligible accounts receivable as defined in the Loan Agreement. The amount available for borrowing at September 30, 2017, was $1,994,000, according to the borrowing formula contained with the Loan Agreement and subject to other terms and conditions.

The Company has the right to prepay the loans under the Loan Agreement in full at any time; however, if the Term Loan is prepaid prior to maturity, an additional fee of 1% of the Term Loan amount is due. Amounts prepaid under the Term Loan may not be re-borrowed. Upon repayment of the Term Loan at any time, the Lenders are entitled to an additional fee equal to 4% of the Term Loan amount.

The Loan Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements, and compliance with applicable laws and regulations. Further, the Loan Agreement contains customary negative covenants limiting the ability of the Company and its subsidiaries, among other things, to grant liens on the pledged collateral, incur additional indebtedness, make certain investments and acquisitions, and dispose of assets outside the ordinary course of business. The Loan Agreement also contains a financial covenant requiring the Company to maintain a continuing level of cash plus available borrowing capacity based on a formula. Management believes the Company was in compliance with all covenants as of September 30, 2017.

The Company has financed various insurance premiums with notes payable. The balance of $67,000 at September 30, 2017, will be repaid by December 2017.

As of September 30, 2017, the Company had cash and cash equivalents plus available borrowings under its revolving loan totaling $8,283,000. As such, management believes its cash balances and available borrowings are sufficient to support operations through at least November 15, 2018. The Company expects to continue to require cash for its operations during this period and may seek changes in its debt instruments, reductions in planned operating expenses, and/or may pursue additional capital to support its operations should the need arise. Management believes that it can execute on one or more of these initiatives or obtain additional financing; however, there can be no assurance that such actions can be consummated or additional financing be obtained on acceptable terms or at all.

Critical Accounting Policies and Estimates

The Company's discussion and analysis of financial condition and results of operations are based on the consolidated financial statements. The preparation of these financial statements requires the Company to make estimates and judgments that affect the amounts reported in them. The Company's critical accounting policies and estimates include those related to revenue recognition, the valuations of inventories and deferred income tax assets, measuring stock compensation and warranty costs, determining useful lives of intangible assets, and making asset impairment valuations. The Company bases its estimates on historical experience and on various other assumptions that management believes to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. For additional information about the Company's critical accounting policies and estimates, see Item 7 and Note (2) of the financial statements included in the Company's Form 10-K for the year ended December 31, 2016. There were no significant changes in critical accounting policies and estimates during the nine months ended September 30, 2017.

In February 2016, the FASB issued ASU 2016-02, *Leases - Topic 842. ASU 2016-02* requires the recognition by lessees on the balance sheet of lease assets and lease liabilities for those leases classified as operating leases. The new standard is effective for financial statements issued for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted for financial statements that have not been previously issued. The Company is evaluating the impact that this standard will have on its financial statements and results of operations.

In April 2016, the FASB issued ASU 2016-10, *Topic 606, Revenue from Contracts with Customers*. ASU 2016-10 amends the revenue recognition standard it had issued in May 2014 (ASU 2014-09). The core principle of the guidance in Topic 606 is that an entity should recognize revenue to depict the transfer of promised goods and services to customers in an amount that reflects the consideration to which an entity expected to be entitled in exchange for those goods and services. The amendments in ASU 2016-10 clarify the identification of performance obligations and the licensing implementation guidance. The new standard is effective for financial statements issued for fiscal years beginning after December 15, 2017, including interim reporting periods therein. The Company is evaluating the effect that this standard will have on its financial statements and results of operations; however, it does not expect the new standard to have a significant impact. The Company recognizes revenue at the time of transfer of its products to its customers based upon shipping terms. Further, the Company does not incur post-shipment obligations with the exception of product warranties, which are generally fulfilled from its corporate facility and which are not material relative to the sale of the product.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company at times has certain exposures to market risk related to changes in interest rates and exchange rates. The Company holds no derivative securities for trading or other purposes and is not subject in any material respect to commodity risk. Although the Company sells its products worldwide in U.S. dollars and has only limited currency risks, changes in foreign currency exchange rates could make our products less price competitive in our international markets.

ITEM 4. CONTROLS AND PROCEDURES

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the Company's Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure based on the definition of "disclosure controls and procedures" in Rule 13a-15(e). In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and the Company's Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of September 30, 2017. Based upon the foregoing evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of that date.

There have been no changes in the Company's internal control over financial reporting during the quarter ended September 30, 2017, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Reference is made to the Certifications of the Chief Executive Officer and the Chief Financial Officer about these and other matters attached as Exhibits 31.1, 31.2, and 32.1 to this quarterly report on Form 10-Q.

PART II – OTHER INFORMATION

ITEM 6. EXHIBITS

10.1	First Amendment to Loan and Security Agreement dated November 3, 2017
31.1	Certification pursuant to Rule 13a-14(a) of Thomas M. Patton, President and Chief Executive Officer
31.2	Certification pursuant to Rule 13a-14(a) of Jeffery A. Baird, Chief Financial Officer
32.1	Certification pursuant to 18 U.S.C. 1350 of Periodic Financial Report of Thomas M. Patton, President and Chief Executive Officer, and Jeffery A. Baird, Chief Financial Officer
101	Interactive data files pursuant to Rule 405 of Regulation S-T.

SIGNATURES

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

CAS MEDICAL SYSTEMS, INC.
(Registrant)

/s/ Thomas M. Patton — Date: November 9, 2017

By: Thomas M. Patton
President and Chief Executive Officer

/s/ Jeffery A. Baird — Date: November 9, 2017

By: Jeffery A. Baird
Chief Financial Officer

EXHIBIT 10.1

FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT (this "**Amendment**"), dated as of November 3, 2017 (the "**Amendment Effective Date**"), is made by and among CAS Medical Systems, Inc., a Delaware corporation ("**Borrower**"), Solar Capital Ltd., a Maryland corporation ("**Solar**"), in its capacity as administrative and collateral agent for Lenders (in such capacity, together with its successors and assigns in such capacity, "**Agent**"), and the Lenders listed on Schedule A of the Loan and Security Agreement (as defined below) or otherwise a party hereto from time to time including Solar in its capacity as a Lender and Western Alliance Bank, an Arizona corporation, as a Lender (each a "**Lender**" and collectively, the "**Lenders**").

The Borrower, the Lenders and Agent are parties to a Loan and Security Agreement dated as of June 30, 2016 (as amended, restated or modified from time to time, the "**Loan and Security Agreement**"). The Borrower has requested that the Lenders agree to certain amendments to the Loan and Security Agreement. The Lenders have agreed to such request, subject to the terms and conditions hereof.

Accordingly, the parties hereto agree as follows:

SECTION 1 Definitions; Interpretation.

(a) **Terms Defined in Loan and Security Agreement**. All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan and Security Agreement.

(b) **Interpretation**. The rules of interpretation set forth in Section 1 of the Loan and Security Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

SECTION 2 Amendments to the Loan and Security Agreement.

(a) The Loan and Security Agreement shall be amended as follows effective as of the Amendment Effective Date:

(i) Amended Definitions. The following definitions are hereby amended as follows:

"**Revolving Loan Commitment Termination Date**". The definition of "Revolving Loan Commitment Termination Date" is hereby amended by replacing "July 1, 2018" with "July 1, 2019" therein.

(ii) Section 6.3(d). Section 6.3(d) is hereby amended and restated as follows:

"(d) (i) So long as no Revolving Loans are outstanding, as soon as available and in any event within ten (10) days after the end of each calendar month, and (ii) as long as any Revolving Loans are outstanding, on a biweekly basis (as soon as available and in any event no later than the fifteenth (15th) day of each calendar month and the end of each calendar month), and, in each case, at such other times as Agent or the Revolving Lenders may reasonably require, Borrower shall deliver to Agent and the Revolving Lenders a Borrowing Base Certificate, certified by Borrower's president, chief executive officer, chief financial officer or treasurer, setting forth the Borrowing Base of Borrower as at the end of the most-recently ended fiscal month or as at such other date as Agent may reasonably require."

(iii) Section 2.6(d). Section 2,6(d) is hereby amended by replacing "three tenths of one percent (0.30%)" with "one percent (1.00%)" therein.

(b) **References Within Loan and Security Agreement**. Each reference in the Loan and Security Agreement to "this Agreement" and the words "hereof," "herein," "hereunder," or words of like import, shall mean and be a reference to the Loan and Security Agreement as amended by this Amendment.

SECTION 3 Conditions of Effectiveness. The effectiveness of Section 2 of this Amendment shall be subject to the satisfaction of each of the following conditions precedent:

(a) **Fees and Expenses**. The Borrower shall have paid (i) all invoiced costs and expenses then due in accordance with Section 5(e), and (ii) all other fees, costs and expenses, if any, due and payable as of the Amendment Effective Date under the Loan and Security Agreement.

(b) **This Amendment**. Agent shall have received this Amendment, executed by Agent, the Lenders and the Borrower.

(c) **Representations and Warranties; No Default**. On the Amendment Effective Date, after giving effect to the amendment of the Loan and Security Agreement contemplated hereby:

(i) The representations and warranties contained in Section 4 shall be true and correct on and as of the Amendment Effective Date as though made on and as of such date; and

(ii) There exist no Events of Default or events that with the passage of time would result in an Event of Default.

SECTION 4 Representations and Warranties. To induce the Lenders to enter into this Amendment, the Borrower hereby confirms, as of the date hereof, (a) that the representations and warranties made by it in Section 5 of the Loan and Security Agreement and in the other Loan Documents are true and correct in all material respects; *provided*, *however*, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; (b) that there has not been and there does not exist a Material Adverse Change; and (c) other than as updated on Exhibit A attached hereto, that the information included in the Perfection Certificate delivered to Agent on the Effective Date remains true and correct. For the purposes of this Section 4, (i) each reference in Section 5 of the Loan and Security Agreement to "this Agreement," and the words "hereof," "herein," "hereunder," or words of like import in such Section, shall mean and be a reference to the Loan and Security Agreement as amended by this Amendment, and (ii) any representations and warranties which relate solely to an earlier date shall not be deemed confirmed and restated as of the date hereof (provided that such representations and warranties shall be true, correct and complete as of such earlier date).

SECTION 5 Miscellaneous.

(a) **Loan Documents Otherwise Not Affected; Reaffirmation**. Except as expressly amended pursuant hereto or referenced herein, the Loan and Security Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. The Lenders' and Agent's execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. The Borrower hereby reaffirms the grant of security under Section 4.1 of the Loan and Security Agreement and hereby reaffirms that such grant of security in the Collateral secures all Obligations under the Loan and Security Agreement, including without limitation any Term Loans funded on or after the Amendment Effective Date, as of the date hereof.

(b) **Conditions**. For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the Amendment Effective Date specifying its objection thereto.

(c) **Release**. In consideration of the agreements of Agent and each Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and each Lender, and its successors and assigns, and its present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lenders and all such other persons being hereinafter referred to collectively as the "**Releasees**" and individually as a "**Releasee**"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above.

(d) **No Reliance**. The Borrower hereby acknowledges and confirms to Agent and the Lenders that the Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses**. The Borrower agrees to pay to Agent within ten (10) days of its receipt of an invoice (or on the Amendment Effective Date to the extent invoiced on or prior to the Amendment Effective Date), the out-of-pocket costs and expenses of Agent and the Lenders party hereto, and the fees and disbursements of counsel to Agent and the Lenders party hereto (including allocated costs of internal counsel), in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the Amendment Effective Date or after such date.

(f) **Binding Effect**. This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law**. **THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES THAT WOULD RESULT IN THE APPLICATION OF ANY LAWS OTHER THAN THE LAWS OF THE STATE OF NEW YORK), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, REGARDLESS OF THE LOCATION OF THE COLLATERAL.**

(h) **Complete Agreement; Amendments**. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions.** Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts**. This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

(k) **Loan Documents**. This Amendment and the documents related thereto shall constitute Loan Documents.

[Balance of Page Intentionally Left Blank; Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment, as of the date first above written.

BORROWER:

CAS MEDICAL SYSTEMS, INC.,
as Borrower

By:_____
Name: Jeffery A. Baird
Title: Chief Financial Officer

AGENT AND LENDER:

SOLAR CAPITAL LTD.,
as Agent and a Lender

By:_____
Name: Anthony Storino
Title: Authorized Signatory

LENDER:

WESTERN ALLIANCE BANK,
as a Lender

By:_____
Name: Bill Wickline
Title: VP, Director of Portfolio Management

EXHIBIT 31.1

CERTIFICATION

I, Thomas M. Patton, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CAS Medical Systems, Inc.;

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

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

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

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

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

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

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

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

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

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

/s/ Thomas M. Patton
Thomas M. Patton
President and Chief Executive Officer

Date: November 9, 2017

EXHIBIT 31.2

CERTIFICATION

I, Jeffery A. Baird, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CAS Medical Systems, Inc.;

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

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

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

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

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

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

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

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

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

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

/s/ Jeffery A. Baird
Jeffery A. Baird
Chief Financial Officer

Date: November 9, 2017

EXHIBIT 32.1

Certification of Periodic Financial Report

Pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, Thomas M. Patton, the President and Chief Executive Officer, and Jeffery A. Baird, the Chief Financial Officer of CAS Medical Systems, Inc. (the "issuer"), do hereby certify that the quarterly report on Form 10-Q accompanying this certification (the "report") fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) and that information contained in the report presents fairly, in all material respects, the financial condition and results of operations of the issuer.

/s/ Thomas M. Patton — Date: November 9, 2017

Thomas M. Patton
President and Chief Executive Officer
CAS Medical Systems, Inc.

/s/ Jeffery A. Baird — Date: November 9, 2017

Jeffery A. Baird
Chief Financial Officer
CAS Medical Systems, Inc.