
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 June 30, 2012

Commission File Number 0-13839

CAS MEDICAL SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

06-1123096

(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 or a smaller reporting company. See definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer Accelerated Filer Non-Accelerated Filer Smaller Reporting Company

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 13,661,192 shares as of August 1, 2012.

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PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CAS Medical Systems, Inc.

Condensed Consolidated Balance Sheets
(Unaudited)

<u>Assets</u>	<u>June 30, 2012</u>	<u>December 31, 2011</u>
Current assets:		
Cash and cash equivalents	\$ 6,598,448	\$ 11,387,300
Short-term investments	2,498,539	2,490,587
Accounts receivable, net of allowance	2,996,513	2,535,331
Inventories	3,611,185	3,276,568
Other current assets	428,623	299,620
Total current assets	<u>16,133,308</u>	<u>19,989,406</u>
Property and equipment:		
Leasehold improvements	311,320	304,396
Equipment at customers	3,032,471	2,374,302
Machinery and equipment	<u>5,323,918</u>	<u>5,034,300</u>
	8,667,709	7,712,998
Accumulated depreciation and amortization	<u>(6,041,855)</u>	<u>(5,583,358)</u>
Property and equipment, net	<u>2,625,854</u>	<u>2,129,640</u>
Intangible and other assets, net	<u>683,180</u>	<u>704,648</u>
Total assets	<u>\$ 19,442,342</u>	<u>\$ 22,823,694</u>

CAS Medical Systems, Inc.

Condensed Consolidated Balance Sheets
(Unaudited)

<u>Liabilities and Stockholders' Equity</u>	<u>June 30, 2012</u>	<u>December 31, 2011</u>
Current liabilities:		
Accounts payable	\$ 1,537,809	\$ 1,340,488
Accrued expenses	<u>1,050,195</u>	<u>1,443,367</u>
Total current liabilities	2,588,004	2,783,855
Deferred gain on sale and leaseback of property	697,470	764,789
Income taxes payable	<u>211,159</u>	<u>211,159</u>
Total liabilities	3,496,633	3,759,803
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 \$10,280,042 at June 30, 2012	8,802,000	8,802,000
Series A exchangeable preferred stock, 54,500 shares issued and outstanding; liquidation value of \$5,902,977 at June 30, 2012	5,135,640	5,135,640
Common stock, \$.004 par value per share, 40,000,000 shares authorized, 13,739,996 and 13,701,273 shares issued at June 30, 2012 and December 31, 2011, respectively, including shares held in treasury	54,960	54,805
Common stock held in treasury, at cost – 86,000 shares	(101,480)	(101,480)
Additional paid-in capital	11,408,290	10,930,927
Accumulated deficit	<u>(9,353,701)</u>	<u>(5,758,001)</u>
Total stockholders' equity	<u>15,945,709</u>	<u>19,063,891</u>
Total liabilities and stockholders' equity	<u>\$ 19,442,342</u>	<u>\$ 22,823,694</u>

See accompanying notes.

CAS Medical Systems, Inc.

Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended June 30		Six Months Ended June 30	
	2012	2011	2012	2011
Net sales	\$ 5,198,300	\$ 5,717,179	\$ 10,607,119	\$ 11,360,303
Cost of sales	<u>3,015,656</u>	<u>3,591,538</u>	<u>6,389,401</u>	<u>7,100,107</u>
Gross profit	2,182,644	2,125,641	4,217,718	4,260,196
Operating expenses:				
Research and development	949,704	805,229	1,839,821	1,517,573
Selling, general and administrative	<u>2,897,182</u>	<u>2,977,904</u>	<u>6,004,703</u>	<u>5,668,747</u>
	<u>3,846,886</u>	<u>3,783,133</u>	<u>7,844,524</u>	<u>7,186,320</u>
Operating loss	(1,664,242)	(1,657,492)	(3,626,806)	(2,926,124)
Other income, net	<u>14,633</u>	<u>2,493</u>	<u>31,105</u>	<u>5,055</u>
Loss from continuing operations before income taxes	(1,649,609)	(1,654,999)	(3,595,701)	(2,921,069)
Income tax benefit	<u>—</u>	<u>107,097</u>	<u>—</u>	<u>127,544</u>
Loss from continuing operations	(1,649,609)	(1,547,902)	(3,595,701)	(2,793,525)
Income from discontinued operations, net of income taxes	<u>—</u>	<u>207,896</u>	<u>—</u>	<u>247,588</u>
Net loss	(1,649,609)	(1,340,006)	(3,595,701)	(2,545,937)
Preferred stock dividend accretion	<u>278,332</u>	<u>74,158</u>	<u>551,877</u>	<u>74,158</u>
Net loss applicable to common stockholders	<u>\$ (1,927,941)</u>	<u>\$ (1,414,164)</u>	<u>\$ (4,147,578)</u>	<u>\$ (2,620,095)</u>
Per share basic and diluted income (loss) applicable to common stockholders:				
Continuing operations	<u>\$ (0.15)</u>	<u>\$ (0.12)</u>	<u>\$ (0.31)</u>	<u>\$ (0.22)</u>
Discontinued operations	<u>\$ —</u>	<u>\$ 0.01</u>	<u>\$ —</u>	<u>\$ 0.02</u>
Net loss	<u>\$ (0.15)</u>	<u>\$ (0.11)</u>	<u>\$ (0.31)</u>	<u>\$ (0.20)</u>
Weighted average number of common shares outstanding:				
Basic and diluted	13,260,345	13,086,493	13,239,593	13,048,845

See accompanying notes.

CAS Medical Systems, Inc.

Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Six Months Ended	
	June 30,	
	2012	2011
OPERATING ACTIVITIES:		
Net loss	\$ (3,595,701)	\$ (2,545,937)
Less income from discontinued operations	—	247,588
Loss from continuing operations	(3,595,701)	(2,793,525)
Adjustments to reconcile net loss from continuing operations to net cash used in operating activities:		
Depreciation and amortization	501,892	454,569
Stock compensation	466,778	420,497
Impaired capitalized patent costs	27,262	—
Amortization of gain on sale and leaseback of property	(67,319)	(67,319)
Deferred income taxes	—	(127,545)
Changes in operating assets and liabilities:		
Accounts receivable	(461,182)	(726,851)
Inventories	(334,617)	362,148
Other current assets	(129,003)	(121,066)
Accounts payable and accrued expenses	(195,851)	(543,077)
Income taxes payable	—	13,655
Net cash used in operating activities of continuing operations	<u>(3,787,741)</u>	<u>(3,128,514)</u>
INVESTING ACTIVITIES:		
Expenditures for property and equipment	(964,510)	(294,142)
Short-term investments	(7,952)	—
Purchase of intangible assets	(39,390)	(105,889)
Net cash used in investing activities of continuing operations	<u>(1,011,852)</u>	<u>(400,031)</u>
FINANCING ACTIVITIES:		
Proceeds from note payable	—	154,150
Repayment of note payable	—	(19,815)
Proceeds from sale of preferred stock, net	—	13,876,562
Proceeds from issuance of common stock	10,741	38,113
Net cash provided by financing activities of continuing operations	<u>10,741</u>	<u>14,049,010</u>
Net cash (used in) provided by continuing operations	<u>(4,788,852)</u>	<u>10,520,465</u>
Cash flows from discontinued operations		
Cash provided by operating activities of discontinued operations	—	375,133
Net cash provided by discontinued operations	—	375,133
Net change in cash and cash equivalents	(4,788,852)	10,895,598
Cash and cash equivalents, beginning of period	11,387,300	4,492,690
CASH AND CASH EQUIVALENTS, END OF PERIOD	<u>\$ 6,598,448</u>	<u>\$ 15,388,288</u>
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION		
Cash paid during the period for interest	\$ —	\$ —
Cash paid during the period for income taxes	\$ —	\$ —

See accompanying notes.

CAS Medical Systems, Inc.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

June 30, 2012

(1) The Company

CAS Medical Systems, Inc. (the “Company” or “CASMED”) is a medical technology company that develops, manufactures and distributes non-invasive patient monitoring products that are vital to patient care. Our products include the FORE-SIGHT® Absolute Tissue Oximeter and sensors, and our Traditional Monitoring products which include MAXNIBP® blood pressure measurement technology, bedside monitoring products and supplies for neonatal intensive care. These products are designed to provide accurate, non-invasive, biologic measurements that guide healthcare providers to deliver improved patient care. The products are sold by CASMED through its own sales force, via distributors, manufacturers’ representatives and pursuant to original equipment manufacturer (“OEM”) agreements both internationally and in the United States.

(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, 2011. The condensed consolidated balance sheet as of December 31, 2011 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. Estimates that are particularly sensitive to change in the near-term are inventory valuation allowances, deferred income tax asset valuation allowances and allowances for doubtful accounts. Actual results could differ from those estimates. In the opinion of the Company, all adjustments (consisting of normal recurring accruals) 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.

(3) Private Placement of Preferred Stock

On June 8, 2011, the Company entered into an investment agreement pursuant to which the Company issued on June 9, 2011 (i) 95,500 shares of a newly created series of preferred stock, designated “Series A Convertible Preferred Stock,” par value \$0.001 per share, which are convertible into authorized but unissued shares of common stock, par value \$0.004 per share, of the Company and (ii) 54,500 shares of a newly created series of preferred stock, designated “Series A Exchangeable Preferred Stock,” par value \$0.001 per share, which are convertible, following stockholder approval, into authorized but unissued shares of common stock, par value \$0.004 per share, of the Company. A special meeting of the Company’s stockholders took place on August 22, 2011 at which time the stockholders approved proposals that resulted in the modification of the Series A Exchangeable Preferred Stock such that the Series A Exchangeable Preferred Stock now has substantially identical terms to the Series A Convertible Preferred Stock.

The Company received an aggregate cash purchase price of \$15,000,000 representing a per-share purchase price of \$100 for the Series A Convertible Preferred Stock and \$100 for the Series A Exchangeable Preferred Stock. The Company utilized a placement agent to assist in the transaction which was paid a fee of \$900,000 plus certain expenses. The Company received net proceeds, after transaction costs and expenses, of \$13,825,000.

Series A Convertible Preferred Stock

The shares of Series A Convertible Preferred Stock (the "Series A Preferred Stock") are convertible at the option of the holder into common stock at a conversion price of \$2.82 (the "Conversion Price"). The Conversion Price is subject to standard weighted average anti-dilution adjustments.

Following the date of issuance, the stated value (\$100.00 per share) of the Series A Preferred Stock accretes at an annual rate of 7% compounded quarterly. On an annual basis prior to the third anniversary of the original date of issuance, the holders may elect, pursuant to certain requirements, to receive the following twelve months of accretion in the form of a dividend of 7% per annum, payable quarterly in cash at the holder's option. After the third anniversary of the closing, such accretion may be made in cash at the Company's option. The Series A Preferred Stock is subject to certain default provisions whereby the dividend rate would be increased by an additional 5% per annum.

After the third anniversary of the original date of issuance, the Company can force conversion of all, and not less than all, of the outstanding Series A Preferred Stock into Company common stock as long as the closing price of its common stock is at least 250% of the Conversion Price, or \$7.05 per common share, for at least 20 of the 30 consecutive trading days immediately prior to the conversion and the average daily trading volume is greater than 50,000 shares per day over the 30 consecutive trading days immediately prior to such conversion. The Company's ability to cause a conversion is subject to certain other conditions as provided pursuant to the terms of the Series A Preferred Stock.

The Series A Preferred Stock is entitled to a liquidation preference equal to the greater of 100% of the accreted value for each share of Series A 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 Series A Preferred Stock into common stock immediately prior to the liquidation. The Series A Preferred Stock will vote together with the common stock as-if-converted on the original date of issuance. Holders of Series A Preferred Stock are entitled to purchase their pro rata share of additional stock issuances in certain future financings.

Series A Exchangeable Preferred Stock

Prior to approval by the stockholders of the Company at the Special Meeting of Stockholders held on August 22, 2011, holders of the Series A Exchangeable Preferred Stock did not have any voting rights and the stated value of the Series A Exchangeable Preferred Stock of \$100.00 per share accreted at an annual rate of 10%, compounded quarterly. The Series A Exchangeable Preferred Stock was initially recorded as temporary equity as holders had the right to redeem their shares for cash five years from the issuance date. The redemption right terminated upon stockholder approval at which time the Company reclassified the Series A Exchangeable Preferred Stock, including accretion of \$112,509, to permanent equity. Following approval by the stockholders of the Company, the Series A Exchangeable Preferred Stock now has substantially identical terms to the Series A Preferred Stock.

Pursuant to the terms of the Series A Preferred Stock and Series A Exchangeable Preferred Stock, a holder must issue a written request to the Company by June 15th 2011, 2012, or 2013 to receive cash dividends for the applicable succeeding four fiscal quarters ending June 30th, September 30th, December 31st, and March 31st. The holders have elected in writing not to receive cash dividends for the fiscal quarters through March 31, 2013. As of June 30, 2012, \$1,183,020 in dividend accretion has accumulated on the Series A Preferred Stock and the Series A Exchangeable Preferred Stock.

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

Inventories consist of:

	<u>June 30, 2012</u>	<u>December 31, 2011</u>
Raw materials	\$ 2,613,888	\$ 2,504,526
Work in process	23,839	25,331
Finished goods	973,458	746,711
	<u>\$ 3,611,185</u>	<u>\$ 3,276,568</u>

Property and equipment are stated at cost and include FORE-SIGHT cerebral oximetry monitors primarily located at customer sites within the United States. Such equipment is typically held under a no-cost program whereby customers purchase disposable sensors for use with the Company's equipment. The Company retains title to the monitors shipped to its customers under this program. Property and equipment is depreciated using the straight-line method over the estimated useful lives of the assets.

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:

	<u>June 30, 2012</u>	<u>December 31, 2011</u>
Patents and other assets	\$ 716,588	\$ 682,321
Patents pending	293,796	315,935
Purchased technology	46,026	46,026
	<u>1,056,410</u>	<u>1,044,282</u>
Accumulated amortization	(373,230)	(339,634)
	<u>\$ 683,180</u>	<u>\$ 704,648</u>

Amortization expense of intangible and other assets for the six months ended June 30, 2012 was \$33,597. Estimated amortization expense for the calendar year 2012 is \$66,800. Expected amortization expense of intangible and other assets for the next five calendar years follows:

2013	\$ 53,900
2014	26,200
2015	15,800
2016	15,200
2017	15,200
	<u>\$ 126,300</u>

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. For the six months ended June 30, 2012, the Company wrote off \$27,262 of capitalized patent costs related to certain abandoned patents. The Company believes that the carrying amounts of its remaining long-lived assets are fully recoverable.

(5) Principal Products and Services

The Company has categorized its sales of products and services into the following categories:

- Tissue oximetry monitoring products – includes sales of the FORE-SIGHT cerebral monitors, sensors and accessories.
- Traditional vital signs monitoring products - includes:

- 1) Vital signs bedside monitors and accessories incorporating various combinations of measurement parameters for both human and veterinary use. Parameters found in these monitors include the Company's proprietary MAXNIBP non-invasive blood pressure, pulse oximetry, electro-cardiography, temperature, and capnography.
- 2) Blood pressure measurement technology – includes sales to OEM manufacturers of the Company's proprietary MAXNIBP non-invasive blood pressure technology, sold as a discrete module to be included in the OEM customers own multi-parameter monitors, and related license fees.
- 3) Supplies and service – includes sales of neonatal intensive care supplies including electrodes and skin temperature probes, and service repair.

(6) Discontinued Operations

On November 5, 2010, the Company sold certain assets and liabilities related to its Statcorp business unit, which included its blood pressure and infusor cuff product lines, in exchange for \$3,200,000 in cash at closing. As provided in the purchase agreement, the aggregate consideration paid to the Company at closing was subject to an adjustment based upon changes in the net working capital of the business as of the closing date relative to a net working capital target. The adjustment resulted in \$78,964 of additional consideration paid to the Company. Further, the Company earned an additional \$250,000 as of June 30, 2011 as a result of the buyer reaching certain net revenue thresholds in the six-month period following the closing.

There was no impact to operating results from discontinued operations for the six months ended June 30, 2012. Income from discontinued operations was \$247,588, net of income taxes of \$127,545, for the six months ended June 30, 2011 and primarily represented the earn-out fees referred to above and transition services performed by the Company during that period.

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

Basic earnings (loss) per share is calculated by dividing net income (loss) applicable to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings (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. For all periods reported, the Company incurred net losses from continuing operations. Therefore, for each period 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.

At June 30, 2012, stock options and warrants to purchase 1,634,625 and 889,401, 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, 5,738,659 shares of common stock pertaining to the private placement of 150,000 shares of Series A convertible and exchangeable preferred stock issued on June 9, 2011 were also excluded as they would have been anti-dilutive.

The following table presents a reconciliation of the numerators and denominators of basic and diluted loss per share:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2012	2011	2012	2011
Loss from continuing operations	\$ (1,649,609)	\$ (1,547,902)	\$ (3,595,701)	\$ (2,793,525)
Preferred stock dividend accretion	278,332	74,158	551,877	74,158
Loss from continuing operations applicable to common stockholders	(1,927,941)	(1,622,060)	(4,147,578)	(2,867,683)
Income from discontinued operations	—	207,896	—	247,588
Net loss applicable to common stockholders	<u>\$ (1,927,941)</u>	<u>\$ (1,414,164)</u>	<u>\$ (4,147,578)</u>	<u>\$ (2,620,095)</u>
Weighted average shares outstanding, net of unvested restricted common shares – used to compute basic and diluted income (loss) per share applicable to common stockholders	<u>13,260,345</u>	<u>13,086,493</u>	<u>13,239,593</u>	<u>13,048,845</u>

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

Stock compensation expense was \$238,130 and \$210,308, and \$466,778 and \$420,497 for the three and six-month periods ended June 30, 2012 and 2011, respectively.

As of June 30, 2012, the unrecognized stock-based compensation cost related to stock option awards and unvested restricted common stock was \$1,829,850. Such amount, net of estimated forfeitures, will be recognized in operations through the fourth quarter of 2015.

The following table summarizes the Company's stock option information as of and for the six-month period ended June 30, 2012:

	Option Shares	Weighted- Average Exercise Price	Aggregate Intrinsic Value (1)	Weighted-Average Contractual Life Remaining in Years
Outstanding at December 31, 2011	1,697,425	\$ 2.29	\$ 57,232	8.1
Granted	30,000	1.74		
Cancelled	(92,500)	2.38		
Exercised	(300)	1.50		
Outstanding at June 30, 2012	<u>1,634,625</u>	<u>\$ 2.28</u>	<u>\$ 42,614</u>	<u>7.5</u>
Exercisable at June 30, 2012	<u>595,084</u>	<u>\$ 2.45</u>	<u>\$ 27,884</u>	<u>5.1</u>
Vested and expected to vest at June 30, 2012	<u>1,603,453</u>	<u>\$ 2.28</u>	<u>\$ 42,173</u>	<u>7.5</u>

(1) The intrinsic value of a stock option is the amount by which the market value, as of the applicable date, of the underlying stock 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 and members of the board of directors vest typically not less than three years from the grant date. The Company attributes stock-based compensation cost to operations using the straight-line method over the applicable vesting period.

On June 8, 2011, at the Company's annual meeting of stockholders, the CAS Medical Systems, Inc. 2011 Equity Incentive Plan (the "2011 Plan") was approved by its stockholders. The 2011 Plan provides for the availability of a maximum of 1,000,000 shares of the Company's common stock, with a maximum of 500,000 shares available for issuance with respect to awards of restricted stock and restricted stock units. As of June 30, 2012, 491,000 shares of common stock remained available for issuance under the 2011 Plan, of which 466,000 were available for awards as restricted stock. In addition, 34,000 shares remained available under the 2003 Equity Incentive Plan.

During the six months ended June 30, 2012, a stock option for 30,000 shares of common stock was granted to one employee of the Company. The fair value of the option granted was estimated on the date of grant to be \$1.22 per share using the Black-Scholes option-pricing model assuming a weighted average expected stock price volatility of 83.9%, a weighted average expected option life of 5.9 years, an average risk-free interest rate of 1.1% and a 0.0% average dividend yield. The stock option vests over a three year period.

During June 2012, 34,284 shares of restricted common stock were granted to non-employee members of the Board of Directors which vest ratably over twelve months from the date of grant. The grants were intended to approximate \$10,000 in cash value based upon the market price of the Company's stock on the date of grant. There were no other grants of restricted stock during the six months ended June 30, 2012. As of June 30, 2012, 375,118 restricted shares issued to employees and members of the Board of Directors remain issued and non-vested. The unamortized stock compensation expense associated with the restricted shares at June 30, 2012 was \$472,369 and will be recognized through the first quarter of 2015.

A summary of the restricted shares outstanding and changes for the relevant periods follow:

	Six Months Ended June 30, 2012	Weighted Average Grant Date Fair-Value
Outstanding at beginning of period	436,150	\$ 2.23
Granted	34,284	1.75
Cancelled	(2,333)	1.89
Vested	(92,983)	2.29
Outstanding at end of period	<u>375,118</u>	<u>\$ 2.18</u>

(9) Short-term Investments

The Company's short-term investments are held in certificates of deposit ("CDs") with maturities greater than three months. These investments are recorded at amortized cost.

(10) Income Taxes

The Company does not expect to record taxable income during its 2012 fiscal year. As such, income tax benefits that may be generated during 2012 would be offset by a deferred income tax asset valuation allowance. Management established the valuation allowance at December 31, 2009 as a result of then recent 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. As of June 30, 2012, the deferred income tax asset valuation allowance balance was \$4,759,000.

(11) Legal Proceedings

On December 29, 2011, Nellcor Puritan Bennett, LLC, ("Nellcor") filed an action against the Company in the United States District Court for the Eastern District of Michigan alleging (i) breach of the settlement agreement with respect to a prior litigation matter between the parties, (ii) violation of the Lanham Act, (iii) common law unfair competition and (iv) trade libel. The complaint requested injunctive relief and unspecified monetary damages, including compensatory damages and reasonable attorneys' fees. On February 24, 2012, the Company answered the complaint and denied substantially all of the claims and set forth certain affirmative defenses. The Court has issued

a scheduling order requiring the parties to complete discovery by December 3, 2012, requiring the filing of dispositive motions by January 7, 2013 and setting a tentative trial date of July or August 2013. On July 20, 2012, Nellcor filed a partial motion for summary judgment asking the Court to determine that the Company breached the settlement agreement and to enter an order enjoining the Company from taking any further action before the United States Patent and Trademark Office regarding a certain patent reexamination/reissue proceeding. The summary judgment motion does not seek a determination that Nellcor is entitled to damages, but does reserve the right to seek damages in a later motion. The Company's time for filing a response has not expired, and it plans on opposing the summary judgment motion. The matter remains pending, and while there can be no assurance as to the ultimate outcome, the Company does not believe at this time that its disposition would result in a material adverse effect on the Company.

(12) Subsequent Event

On July 31, 2012, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with East West Bank (the "Bank"). Pursuant to the Loan Agreement, the Bank provided the Company with a secured \$3,500,000 term loan (the "Term Loan") which bears interest at 5.5% and is scheduled to mature on July 31, 2015. The Term Loan contains a twelve month interest-only feature, with principal payable in 24 equal installments of approximately \$154,000 commencing in August 2013.

The Loan Agreement also provides for a \$2,500,000 revolving line-of-credit which expires on January 31, 2014 (the "Revolver"). Under the Loan Agreement, advances under the Revolver bear interest at a floating rate equal to 2.00% above the Bank's prime rate (with a 3.25% floor on the prime rate). Interest on the loans is payable monthly. Under the terms of the Loan Agreement, the Company is permitted to borrow against eligible accounts receivable as defined under the Loan Agreement according to pre-established criteria.

The obligations under the Loan Agreement are secured by a lien on substantially all assets of the Company, excluding intellectual property; provided that following an event of default, such security interest would also include intellectual property.

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, make certain investments and acquisitions and dispose of assets outside the ordinary course of business. The Loan Agreement also contains financial covenants, measured quarterly, relating to the Company's tangible net worth, and non-financial covenants with respect to the timing of certain new product approvals.

In connection with the Loan Agreement, on July 31, 2012 the Company issued to the Bank a warrant to purchase 133,333 shares of Company common stock for a five-year period expiring on July 31, 2017, at an exercise price of \$1.80 per share.

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, as amended, and Section 21E of the Securities Exchange Act of 1934, 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: foreign currency fluctuations, 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 by the Company's competitors, increased price competition, 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 payors, changes to federal research and development grant programs presently utilized by the Company and other factors described in greater detail in the Company's most recent annual report on Form 10-K.

Results of Operations

For the three months ended June 30, 2012, the Company reported a net loss applicable to common stockholders of \$1,928,000, or (\$0.15) per basic and diluted common share, compared to a net loss applicable to common stockholders of \$1,414,000, or (\$0.11) per basic and diluted common share, for the three months ended June 30, 2011. The loss from continuing operations was \$1,650,000 compared to a loss from continuing operations of \$1,548,000 reported for the three months ended June 30, 2011.

For the six months ended June 30, 2012, the Company incurred a net loss applicable to common stockholders of \$4,148,000, or (\$0.31) per basic and diluted common share, compared to a net loss of applicable to common stockholders of \$2,620,000, or (\$0.20) per basic and diluted common share, for the first six months of the prior year. The loss from continuing operations was \$3,596,000 compared to a loss from continuing operations of \$2,794,000 reported for the six months ended June 30, 2011. There were no results from discontinued operations for the six months ended June 30, 2012 compared to income from discontinued operations of \$248,000, or \$0.02 per basic and diluted share, for the six months ended June 30, 2011.

The Company generated revenues of \$5,198,000 for the three months ended June 30, 2012, a decrease of \$519,000, or 9%, compared to revenues of \$5,717,000 for the three months ended June 30, 2011. The following table provides information with respect to revenues by major category:

Total Revenues (\$000's)

	<u>Three Months Ended June 30, 2012</u>	<u>Three Months Ended June 30, 2011</u>	<u>Increase/ (Decrease)</u>	<u>% Change</u>
Tissue Oximetry Monitoring	\$ 1,930	\$ 1,774	\$ 156	9%
Traditional Vital Signs Monitoring	3,268	3,943	(675)	(17%)
	<u>\$ 5,198</u>	<u>\$ 5,717</u>	<u>\$ (519)</u>	<u>(9%)</u>
Domestic Sales	\$ 3,834	\$ 4,183	\$ (349)	(8%)
International Sales	1,364	1,534	(170)	(11%)
	<u>\$ 5,198</u>	<u>\$ 5,717</u>	<u>\$ (519)</u>	<u>(9%)</u>

Tissue oximetry product revenues of \$1,930,000 for the three months ended June 30, 2012 were \$156,000, or 9%, above the \$1,774,000 reported for the same period in the prior year led by increased sensor sales. As of June 30, 2012, the Company's worldwide installed base of oximetry monitors was 638 units, an increase of 33% above the installed base of 480 as of June 30, 2011.

Traditional vital signs monitoring product revenues for the three months ended June 30, 2012 decreased \$675,000, or 17%, to \$3,268,000 from \$3,943,000 reported for the same period in the prior year. Lower sales of vital signs monitors to the U.S. government were primarily responsible for the shortfall.

Sales of all products to the U.S. market accounted for \$3,834,000, or 74%, of the total revenues reported for the three months ended June 30, 2012, a decrease of \$349,000, or 8%, from the \$4,183,000 of U.S. sales reported for the three months ended June 30, 2011. Increased domestic tissue oximetry sales were more than offset by lower domestic traditional vital signs monitor sales. International sales of all products accounted for \$1,364,000, or 26%, of the total revenues reported for the three months ended June 30, 2012, a decrease of \$170,000, or 11%, from the \$1,534,000 reported for the same period of the prior year. Increases in international traditional vital signs monitor sales were more than offset by lower tissue oximetry sales.

The following table provides information with respect to tissue oximetry revenues:

Tissue Oximetry Revenues (\$000's)

	Three Months Ended June 30, 2012	Three Months Ended June 30, 2011	Increase/ (Decrease)	% Change
Sensor Sales	\$ 1,722	\$ 1,184	\$ 538	45%
Monitors & Accessories	208	590	(382)	(65%)
	<u>\$ 1,930</u>	<u>\$ 1,774</u>	<u>\$ 156</u>	<u>9%</u>
Domestic Sales	\$ 1,586	\$ 1,077	\$ 509	47%
International Sales	344	697	(353)	(51%)
	<u>\$ 1,930</u>	<u>\$ 1,774</u>	<u>\$ 156</u>	<u>9%</u>

Worldwide tissue oximetry sensor sales increased 45% to \$1,722,000 for the second quarter of 2012 from \$1,184,000 for the second quarter of 2011. Domestic tissue oximetry product sales were \$1,586,000, an increase of \$509,000, or 47%, from the \$1,077,000 recorded for the second quarter of 2011. International tissue oximetry product sales were \$344,000, a decrease of \$353,000 from the second quarter of 2011 as a result of both lower monitor and sensor sales. International sales of tissue oximetry monitors and sensors continue to be subject to significant variability due to the small number of distributors, the effect of tenders and the small overall volume.

Total Revenues (\$000's)

	Six Months Ended June 30, 2012	Six Months Ended June 30, 2011	Increase/ (Decrease)	% Change
Tissue Oximetry Monitoring	\$ 3,634	\$ 3,337	\$ 297	9%
Traditional Vital Signs Monitoring	6,973	8,023	(1,050)	(13%)
	<u>\$ 10,607</u>	<u>\$ 11,360</u>	<u>\$ (753)</u>	<u>(7%)</u>
Domestic Sales	\$ 8,045	\$ 8,241	\$ (196)	(2%)
International Sales	2,562	3,119	(557)	(18%)
	<u>\$ 10,607</u>	<u>\$ 11,360</u>	<u>\$ (753)</u>	<u>(7%)</u>

Tissue oximetry product revenues of \$3,634,000 for the six months ended June 30, 2012 were \$297,000, or 9%, above the \$3,337,000 reported for the same period in the prior year led by increased sensor sales.

Traditional vital signs monitoring product revenues for the six months ended June 30, 2012 decreased \$1,050,000, or 13%, to \$6,973,000 from \$8,023,000 reported for the same period in the prior year. Decreases in sales of vital signs monitors primarily to the U.S. government were partially offset by increases in international vital signs monitor sales.

Sales of all products to the U.S. market accounted for \$8,045,000, or 76%, of the total revenues reported for the six months ended June 30, 2012, a decrease of \$196,000, or 2%, from the \$8,241,000 of U.S. sales reported for the six months ended June 30, 2011. The decrease represents the net effect of higher sales of tissue oximetry products and OEM technology products which were more than offset by lower vital signs monitor sales. International sales of all products accounted for \$2,562,000, or 24%, of the total revenues reported for the six months ended June 30, 2012, a decrease of \$557,000, or 18%, from the \$3,119,000 reported for the same period of the prior year. Decreases in tissue oximetry sales were partially offset by increases in vital signs monitor sales.

The following table provides information with respect to tissue oximetry revenues:

Tissue Oximetry Revenues (\$000's)

	Six Months Ended June 30, 2012	Six Months Ended June 30, 2011	Increase/ (Decrease)	% Change
Sensor Sales	\$ 3,168	\$ 2,354	\$ 814	35%
Monitors & Accessories	466	983	(517)	(53%)
	<u>\$ 3,634</u>	<u>\$ 3,337</u>	<u>\$ 297</u>	<u>9%</u>
Domestic Sales	\$ 2,916	\$ 2,004	\$ 912	46%
International Sales	718	1,333	(615)	(46%)
	<u>\$ 3,634</u>	<u>\$ 3,337</u>	<u>\$ 297</u>	<u>9%</u>

Worldwide tissue oximetry product sales increased 9% to \$3,634,000 for the first six months of 2012 from \$3,337,000 for the first six months of 2011. A 35% increase in worldwide sensor sales was partially offset by decreases in oximeter monitor sales. Domestic tissue oximetry product sales were \$2,916,000, an increase of \$912,000, or 46%, from the \$2,004,000 recorded for the first six months of 2011. International tissue oximetry product sales were \$718,000, a decrease of \$615,000, or 46%, from the first six months of 2011 as a result of both lower monitor and sensor sales. International sales of tissue oximetry monitors and sensors are subject to large variability given the small number of distributors, the effect of tenders and the small overall volume.

Cost of sales was \$3,016,000, or 58%, of revenues for the three months ended June 30, 2012 compared to \$3,592,000, or 62.8% of revenues, for the same period in the prior year. Cost of sales was \$6,389,000, or 60.2% of revenues for the six months ended June 30, 2012 compared to \$7,100,000, or 62.5%, for the six months ended June 30, 2011. Slightly lower gross margins from unfavorable product mix were more than offset by lower manufacturing variances, improved factory productivity and reduced warranty costs.

Total operating expenses for the three months ended June 30, 2012 increased \$64,000, or 2%, to \$3,847,000 from \$3,783,000 for the three months ended June 30, 2011. Operating expenses for the first six months increased \$659,000, or 9%, to \$7,845,000 from \$7,186,000. Operating expenses increased as expected over 2011 levels as a result of incremental sales and marketing costs related to expansion of sales management and field sales personnel for the Company's tissue oximetry product line and planned increases in R&D expenditures. Management expects operating expenses to increase for the duration of the 2012 calendar year.

Research and development expenses increased \$145,000, or 18%, to \$950,000 for the three months ended June 30, 2012 compared to \$805,000 for the three months ended June 30, 2011. R&D expenses increased \$322,000, or 21%, to \$1,840,000 for the six months ended June 30, 2012 compared to \$1,518,000 for the same period of the prior year. The increase for the three and six-month periods resulted from increased personnel related costs and increased clinical evaluation costs. R&D expenses are reported net of reimbursements from the National Institutes of Health ("NIH"). NIH reimbursements totaled \$230,000 for the six months ended June 30, 2012 compared to \$289,000 for the six months ended June 30, 2011. As of June 30, 2012, a maximum of approximately \$100,000 remains available under the \$2.8 million multi-year NIH award received in 2007.

Selling, general and administrative ("S,G&A") expenses decreased \$81,000, or 3%, to \$2,897,000 for the three months ended June 30, 2012 compared to \$2,978,000 for the three months ended June 30, 2011. The decreases were comprised of a number of factors including lower marketing spending and reduced administrative costs. For the six months ended June 30, 2012, S,G&A expenses were \$6,005,000, an increase of 6% from the \$5,669,000 reported for the first six months of 2011. The increases were primarily related to increased personnel including travel and entertainment and outside professional services.

Other income improved to \$15,000 and \$31,000, respectively, for the three and six month periods ended June 30, 2012 compared to \$2,000 and \$5,000, respectively, of income reported for the three and six month periods ended June 30, 2011. The improvement results from interest income associated with interest bearing cash accounts and short-term investments.

The Company does not expect to record taxable income during its 2012 fiscal year. Income tax benefits that may be generated during 2012 would be offset by a deferred income tax asset valuation allowance. The income tax benefit for the six months ended June 30, 2011 of \$128,000 for continuing operations was offset by related income tax expense for discontinued operations.

Management established the valuation allowance as of December 31, 2009 as a result of then recent 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. As of June 30, 2012, the deferred income tax asset valuation allowance balance was \$4,759,000.

Financial Condition, Liquidity and Capital Resources

As of June 30, 2012, the Company's cash and cash equivalents and short-term investments totaled \$9,097,000 compared to \$13,878,000 as of December 31, 2011. Working capital decreased \$3,661,000 to \$13,545,000 as of June 30, 2012 from \$17,206,000 as of December 31, 2011.

Cash used in continuing operations for the six months ended June 30, 2012 was \$3,788,000 compared to cash used in operations of \$3,129,000 for the same period in the prior year. Losses from continuing operations before depreciation, amortization and stock compensation expenses, and increases in accounts receivable and inventories were primarily responsible for the cash used by continuing operations. Cash used in operations for the six months ended June 30, 2011 resulted primarily from losses from continuing operations before depreciation, amortization and stock compensation expense and increases in accounts receivable and decreases in accounts payable and accrued expenses.

Cash used in investing activities was \$1,012,000 for the six months ended June 30, 2012 compared to cash used in investing activities of \$400,000 for the same period in the prior year. Expenditures for property and equipment for both periods were primarily comprised of Fore-Sight cerebral oximeter customer placements and demonstration equipment requirements.

On July 31, 2012, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with East West Bank (the "Bank"). Pursuant to the Loan Agreement, the Bank provided the Company with a secured \$3,500,000 term loan (the "Term Loan") which bears interest at 5.5% and is scheduled to mature on July 31, 2015. The Term Loan contains a twelve month interest-only feature, with principal payable in 24 equal installments of approximately \$154,000 commencing in August 2013.

The Loan Agreement also provides for a \$2,500,000 revolving line-of-credit which expires on January 31, 2014 (the "Revolver"). Under the Loan Agreement, advances under the Revolver bear interest at a floating rate equal to 2.00% above the Bank's prime rate (with a 3.25% floor on the prime rate). Interest on the loans is payable monthly. Under the terms of the Loan Agreement, the Company is permitted to borrow against eligible accounts receivable as defined under the Loan Agreement according to pre-established criteria.

The obligations under the Loan Agreement are secured by a lien on substantially all assets of the Company, excluding intellectual property; provided that following an event of default, such security interest would also include intellectual property.

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, make certain investments and acquisitions and dispose of assets outside the ordinary course of business. The Loan Agreement also contains financial covenants, measured quarterly, relating to the Company's tangible net worth, and non-financial covenants with respect to the timing of certain new product approvals.

In connection with the Loan Agreement, on July 31, 2012 the Company issued to the Bank a warrant to purchase 133,333 shares of Company common stock for a five-year period expiring on July 31, 2017, at an exercise price of \$1.80 per share.

Our 2012 business plans call for additional discretionary expenditures primarily to increase our efforts to develop and market our Fore-Sight tissue oximetry technology. Those business plans are to be funded from our current cash on hand and funds available from the debt financing referred to above, the aggregate of which is expected to be sufficient to finance our operations for at least the next twelve months.

Cash flows may be influenced by a number of factors, including changing market conditions, market acceptance of the Fore-Sight system, and the loss of one or more key customers.

Critical Accounting Policies and Estimates

The Company's discussion and analysis of financial condition and results of operations are based on the condensed 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 to the financial statements included in the Company's Form 10-K for the year ended December 31, 2011. There were no significant changes in critical accounting policies and estimates during the three months ended June 30, 2012.

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. The Company holds no derivative securities for trading or other purposes and is not subject in any material respect to currency or other commodity risk.

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 June 30, 2012. 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 June 30, 2012 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 1. LEGAL PROCEEDINGS

On December 29, 2011, Nellcor Puritan Bennett, LLC, (“Nellcor”) filed an action against the Company in the United States District Court for the Eastern District of Michigan alleging (i) breach of the settlement agreement with respect to a prior litigation matter between the parties, (ii) violation of the Lanham Act, (iii) common law unfair competition and (iv) trade libel. The complaint requested injunctive relief and unspecified monetary damages, including compensatory damages and reasonable attorneys’ fees. On February 24, 2012, the Company answered the complaint and denied substantially all of the claims and set forth certain affirmative defenses. The Court has issued a scheduling order requiring the parties to complete discovery by December 3, 2012, requiring the filing of dispositive motions by January 7, 2013 and setting a tentative trial date of July or August 2013. On July 20, 2012, Nellcor filed a partial motion for summary judgment asking the Court to determine that the Company breached the settlement agreement and to enter an order enjoining the Company from taking any further action before the United States Patent and Trademark Office regarding a certain patent reexamination/reissue proceeding. The summary judgment motion does not seek a determination that Nellcor is entitled to damages, but does reserve the right to seek damages in a later motion. The Company’s time for filing a response has not expired, and it plans on opposing the summary judgment motion. The matter remains pending, and while there can be no assurance as to the ultimate outcome, the Company does not believe at this time that its disposition would result in a material adverse effect on the Company.

ITEM 6. EXHIBITS

- 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: August 8, 2012

By: Thomas M. Patton
President and Chief Executive Officer

/s/ Jeffery A. Baird

Date: August 8, 2012

By: Jeffery A. Baird
Chief Financial Officer

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

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

Date: August 8, 2012

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

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

Date: August 8, 2012

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 fairly presents, in all material respects, the financial condition and results of operations of the issuer.

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

August 8, 2012

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

August 8, 2012