

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the Quarterly Period Ended March 31, 2016

OR

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

For the Period from _____ to _____

Commission file number 0-12183

BOVIE MEDICAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

11-2644611

(IRS Employer Identification No.)

4 Manhattanville Road, Suite 106, Purchase, NY 10577

(Address of principal executive offices)

(914) 468-4009

(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 (§232.405 of this chapter) 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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company)

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

The number of shares of the registrant's common stock \$.001 par value outstanding as of May 9, 2016 was 27,194,251.

BOVIE MEDICAL CORPORATION
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FOR THE QUARTER ENDED MARCH 31, 2016

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PART I. FINANCIAL INFORMATION

ITEM 1: FINANCIAL STATEMENTS

BOVIE MEDICAL CORPORATION
CONSOLIDATED BALANCE SHEETS
MARCH 31, 2016 AND DECEMBER 31, 2015
(in thousands)

	March 31, 2016 (Unaudited)	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 9,456	\$ 11,805
Restricted cash	839	839
Trade accounts receivable, net	3,141	2,925
Inventories, net	6,561	5,957
Prepaid expenses and other current assets	<u>533</u>	<u>516</u>
Total current assets	20,530	22,042
Property and equipment, net	6,671	6,810
Brand name and trademark	1,510	1,510
Purchased technology and license rights, net	296	323
Goodwill	185	185
Deposits	123	123
Deferred tax asset	39	25
Other assets	<u>391</u>	<u>430</u>
Total assets	<u>\$ 29,745</u>	<u>\$ 31,448</u>

The accompanying notes are an integral part of the consolidated financial statements.

BOVIE MEDICAL CORPORATION
CONSOLIDATED BALANCE SHEETS
MARCH 31, 2016 AND DECEMBER 31, 2015
(CONTINUED) (in thousands)

	<u>March 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
	<u>(Unaudited)</u>	
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 1,542	\$ 1,214
Accrued payroll	188	321
Accrued vacation	277	228
Current portion of mortgage note payable	3,113	239
Accrued and other liabilities	<u>2,088</u>	<u>2,119</u>
Total current liabilities	7,208	4,121
Mortgage note payable, net of current portion	-	2,934
Notes payable	140	140
Deferred rents	17	18
Deferred tax liability	564	564
Derivative liabilities	<u>180</u>	<u>267</u>
Total liabilities	<u>8,109</u>	<u>8,044</u>
Commitments and Contingencies (see Note 9)		
Stockholders' equity:		
Series B convertible preferred stock, par value \$.001; 3,588,139 issued and 1,975,639 outstanding as of March 31, 2016 and December 31, 2015, respectively	2	2
Common stock, par value \$.001 par value; 40,000,000 shares authorized; 27,194,251 issued and 27,051,172 outstanding as of March 31, 2016 and December 31, 2015, respectively	27	27
Additional paid-in capital	43,035	42,859
Accumulated deficit	<u>(21,428)</u>	<u>(19,484)</u>
Total stockholders' equity	<u>21,636</u>	<u>23,404</u>
Total liabilities and stockholders' equity	<u>\$ 29,745</u>	<u>\$ 31,448</u>

The accompanying notes are an integral part of the consolidated financial statements.

BOVIE MEDICAL CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE THREE MONTHS ENDED MARCH 31, 2016 AND 2015
(unaudited) (in thousands except per share data)

	Three Months Ended March 31,	
	2016	2015
Sales	\$ 7,775	\$ 6,128
Cost of sales	4,452	3,454
Gross profit	3,323	2,674
Other costs and expenses:		
Research and development	668	446
Professional services	357	331
Salaries and related costs	2,100	1,952
Selling, general and administrative	2,191	2,217
Total other costs and expenses	5,316	4,946
Loss from operations	(1,993)	(2,272)
Interest expense, net	(38)	(40)
Change in fair value of liabilities, net	87	1,444
Total other income (expense), net	49	1,404
Loss before income taxes	(1,944)	(868)
Income tax expense (benefit)	-	(8)
Net loss	\$ (1,944)	\$ (876)
Accretion on convertible preferred stock	-	(222)
Gain on conversion of warrants and preferred shares, net	-	13,956
Net income (loss) attributable to common shareholders	\$ (1,944)	\$ 12,858
Income (loss) per share		
Basic	(0.07)	0.69
Diluted	(0.07)	0.57
Weighted average number of shares outstanding- basic	27,051	18,615
Weighted average number of shares outstanding - dilutive	27,051	20,470

The accompanying notes are an integral part of the consolidated financial statements.

BOVIE MEDICAL CORPORATION
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED MARCH 31, 2016
(unaudited) (in thousands)

	Preferred Stock		Common Stock		Additional Paid-in Capital	Deficit	Total
	Shares	Par Value	Shares	Par Value			
December 31, 2015	1,976	\$ 2	27,051	\$ 27	\$ 42,859	\$ (19,484)	\$ 23,404
Stock based compensation	-	-	-	-	176	-	176
Net loss	-	-	-	-	-	(1,944)	(1,944)
March 31, 2016	<u>1,976</u>	<u>\$ 2</u>	<u>27,051</u>	<u>\$ 27</u>	<u>\$ 43,035</u>	<u>\$ (21,428)</u>	<u>\$ 21,636</u>

The accompanying notes are an integral part of the consolidated financial statements.

BOVIE MEDICAL CORPORATION
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE THREE MONTHS ENDED MARCH 31, 2016 AND 2015
(unaudited) (in thousands)

	<u>2016</u>	<u>2015</u>
Cash flows from operating activities		
Net (loss)	\$ (1,944)	\$ (876)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	182	217
Provision for inventory obsolescence	409	(77)
Gain on disposal of property and equipment, net	6	-
Stock based compensation	176	118
Non cash other (income) loss - warrants	(87)	(1,444)
Benefit (provision) for deferred taxes	(14)	-
Changes in current assets and liabilities:		
Trade receivables	(216)	594
Prepaid expenses	(18)	(207)
Inventories	(1,013)	(327)
Deposits and other assets	39	(99)
Accounts payable	328	323
Accrued and other liabilities	(115)	(13)
Net cash used in operating activities	<u>(2,267)</u>	<u>(1,791)</u>
Cash flows from investing activities		
Purchases of property and equipment	(21)	(254)
Net cash used in investing activities	<u>(21)</u>	<u>(254)</u>
Cash flows from financing activities		
Proceeds from stock options/warrants exercised	-	177
Change in restricted cash	-	60
Change in mortgage note payable	(61)	(60)
Proceeds from issuance of common shares, net	-	11,531
Net cash provided by (used in) financing activities	<u>(61)</u>	<u>11,708</u>
Net change in cash and cash equivalents	(2,349)	9,663
Cash and cash equivalents, beginning of period	<u>11,805</u>	<u>5,733</u>
Cash and cash equivalents, end of period	<u>\$ 9,456</u>	<u>\$ 15,396</u>
Cash paid during the three months ended March 31, 2016 and 2015 for:		
Cash paid for:		
Interest paid, net	\$ 38	\$ 40
Income taxes	<u>\$ -</u>	<u>\$ -</u>

The accompanying notes are an integral part of the consolidated financial statements.

BOVIE MEDICAL CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

NOTE 1. BASIS OF PRESENTATION

Unless the context otherwise indicates, the terms "we," "our," "us," "Bovie," and similar terms refer to Bovie Medical Corporation and its consolidated subsidiaries.

The accompanying unaudited consolidated financial statements have been prepared based upon SEC rules that permit reduced disclosure for interim periods. For a more complete discussion of significant accounting policies and certain other information, please refer to the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015. These financial statements reflect all adjustments that are necessary for a fair presentation of results of operations and financial condition for the interim periods shown, including normal recurring accruals and other items. The results for the interim periods are not necessarily indicative of results for the full year.

NOTE 2. INVENTORIES

Inventories are stated at the lower of cost or market. Finished goods and work-in-process inventories include material, labor, and overhead costs. Factory overhead costs are allocated to inventory manufactured in-house based upon labor hours.

Inventories at March 31, 2016 and December 31, 2015 were as follows (in thousands):

	March 31, 2016	December 31, 2015
Raw materials	\$ 6,101	\$ 4,627
Work in process	502	483
Finished goods	1,600	2,080
Gross inventories	8,203	7,190
Less: reserve for obsolescence	(1,642)	(1,233)
Net inventories	\$ 6,561	\$ 5,957

NOTE 3. INTANGIBLE ASSETS

At March 31, 2016 and December 31, 2015 intangible assets consisted of the following (in thousands):

	March 31, 2016	December 31, 2015
Brand name and trademark (life indefinite)	\$ 1,510	\$ 1,510
Purchased technology (9-17 year lives)	1,441	1,441
Less: accumulated amortization	(1,145)	(1,118)
Purchased technology, net	\$ 296	\$ 323

With respect to our trademark and brand name, we continue to market products, release new products and product extensions and maintain and promote these trademarks and brand name in the marketplace through legal registration and such methods as advertising, medical education and trade shows. It is our belief that these trademarks and brand names will generate cash flow for an indefinite period of time. Therefore, we believe our trademarks and brand name intangible assets are not impaired.

Amortization of intangibles, which is included in depreciation and amortization in the accompanying statements of cash flows, was approximately \$27,000 during the three month periods ended March 31, 2016 and 2015.

NOTE 4. NEW ACCOUNTING PRONOUNCEMENTS

In May 2014, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers*, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU No. 2014-09 will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The new standard is effective for us on January 1, 2017. Early application is not permitted. The standard permits the use of either the retrospective or cumulative effect transition method. We are currently evaluating the effect that ASU No. 2014-09 will have on our consolidated financial statements and related disclosures.

No other new accounting pronouncement issued or effective during the period had or is expected to have a material impact on our consolidated financial statements or disclosures.

NOTE 5. FAIR VALUE MEASUREMENTS

Certain assets and liabilities that are measured at fair value on a recurring basis are measured in accordance with FASB ASC Topic 820-10-05, *Fair Value Measurements*. FASB ASC Topic 820-10-05 defines fair value, establishes a framework for measuring fair value and expands the disclosure requirements regarding fair value measurements for financial assets and liabilities as well as for non-financial assets and liabilities that are recognized or disclosed at fair value on a recurring basis in the financial statements.

The statement requires fair value measurement be classified and disclosed in one of the following three categories:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2: Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability; and

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to their fair value measurement. Our derivative financial instruments that are measured at fair value on a recurring basis are all measured at fair value using Level 3 inputs. Level 3 inputs are unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following represents a reconciliation of the changes in fair value of warrants measured at fair value using Level 3 inputs during the three months ended March 31, 2016:

(in \$ thousands)	2013 Placement Agent Warrants
Balance, December 31, 2015	\$ 267
Change in fair value	(87)
Balance, March 31, 2016 ⁽¹⁾	<u>\$ 180</u>

(1) The warrants are valued using a trinomial lattice valuation methodology because that model embodies all of the relevant assumptions that address the features underlying these instruments. Significant assumptions used in the model at March 31, 2016 included the market price of our common stock, an expected dividend yield of zero, the remaining period to the expiration date of the warrants, expected volatility of our common stock over the remaining life of the warrants of 52.8%, estimated based on a review of our historical volatility, and risk-free rates of return of 0.9% for the 2013 warrants based on constant maturity rates published by the U.S. Federal Reserve, applicable to the remaining life of the warrants. We also take into consideration a probability assumption for anti-dilution.

NOTE 6. EARNINGS PER SHARE (in thousands, except EPS)

We compute basic earnings per share ("basic EPS") by dividing the net income or loss by the weighted average number of common shares outstanding for the reporting period. Diluted earnings per share ("diluted EPS") gives effect to all dilutive potential shares outstanding. The following table provides the computation of basic and diluted earnings per share for the three month periods ending March 31, 2016 and 2015:

(in thousands, except per share data)	Three Months Ended	
	March 31,	
	2016	2015
Numerator:		
Net income (loss) available to common shareholders	\$ (1,944)	\$ 12,858
Effect of dilutive securities		
Derivative liability - warrants	\$ -	\$ (1,444)
Accretion on convertible preferred stock	-	222
Numerator for diluted income (loss) per common share	<u>\$ (1,944)</u>	<u>\$ 11,636</u>
Denominator:		
Weighted average shares used to compute basic income (loss) per common share	<u>27,051</u>	<u>18,615</u>
Effect of dilutive securities:		
Derivative liability - warrants	-	326
Convertible preferred stock	-	1,116
Stock options	-	413
Denominator for diluted income (loss) per common share	<u>27,051</u>	<u>20,470</u>
Basic income (loss) per common share	<u>\$ (0.07)</u>	<u>\$ 0.69</u>
Diluted income (loss) per common share	<u>\$ (0.07)</u>	<u>\$ 0.57</u>

For the quarter ended March 31, 2016, the conversion of Series B Preferred Stock into 3,951,278 shares of common stock was excluded from the computation of diluted earnings per share as the effect is anti-dilutive.

For the three months ended March 31, 2016, approximately \$87,000 of the gain on the fair market valuation of the derivative liability was excluded in the computation of diluted earnings per share as the effect is anti-dilutive.

NOTE 7. STOCK-BASED COMPENSATION

Under our stock option plans, our board of directors may grant options to purchase common shares to our key employees, officers, directors and consultants. We account for stock options in accordance with FASB ASC Topic 718, *Compensation – Stock Compensation*, with option expense amortized over the vesting period based on the trinomial lattice option-pricing model fair value on the grant date, which includes a number of estimates that affect the amount of our expense. During the three months ended March 31, 2016, we expensed approximately \$176,000 in stock-based compensation.

Activity in our stock options during the period ended March 31, 2016 was as follows:

	Number of Options (in thousands)	Weighted Average Exercise Price
Outstanding at December 31, 2015	3,131	\$ 3.38
Granted	201	\$ 1.82
Outstanding at March 31, 2016	<u>3,332</u>	<u>\$ 3.26</u>

The grant date fair value of options granted during the first three months of 2016 were estimated on the grant date using a trinomial lattice option-pricing model and the following assumptions: expected volatility of 50.3%, expected term of between 5-8 years, risk-free interest rate of 1.76%, and expected dividend yield of 0%.

Expected volatility is based on a five year average of the historical volatility of the Company's stock. The risk-free rate is based on the rate of U.S. Treasury zero-coupon issues with a remaining term equal to the expected life of the options. The Company uses historical data to estimate pre-vesting forfeiture rates.

NOTE 8. INCOME TAXES

The Company's income tax provision was \$0 with an effective tax rate of 0% for the three months ended March 31, 2016. The Company's effective tax rate differs from the statutory rate primarily due to the change in the valuation allowance on the Company's net deferred tax assets with finite life.

As a result of historical losses, the Company recorded a valuation allowance on the net deferred tax asset with a finite life and does not anticipate recording an income tax benefit related to these deferred tax assets. The Company will reassess the realization of deferred tax assets each reporting period and will be able to reduce the valuation allowance to the extent that the financial results of these operations improve and it becomes more likely than not that the deferred tax assets are realizable.

For the three months ended March 31, 2016, we do not believe we had any significant uncertain tax positions nor did we have any interest or penalties related to any significant uncertain tax positions.

The Company is subject to U.S. federal income tax, state income tax and Bulgarian income tax. Until the respective statutes of limitations expire (which may be as much as 20 years while we have unused NOL's), we are subject to income tax audits in the jurisdictions in which we operate.

NOTE 9. COMMITMENTS, CONTINGENCIES AND CONCENTRATIONS

In March 2014, we entered into a lease for offices located in Purchase, New York, where we are obligated to pay \$9,277 per month for the lease expiring June 14, 2019. The lease is for 3,650 square feet of office space.

In October 2015, pursuant to our acquisition of Bovie Bulgaria, we are obligated to pay \$6,350 per month for the lease expiring on December 31, 2016.

The following is a schedule of approximate future minimum lease payments under operating leases having remaining terms in excess of one year as of March 31, 2016 for the calendar years ended December 31, 2016 and 2017 (in thousands):

2016	\$	187
2017		114
Thereafter		267
Total	\$	<u>568</u>

Rent expense approximated \$45,050 and \$27,000 for the three month periods ending March 31, 2016 and 2015, respectively.

Other future contractual obligations for other agreements with initial terms greater than one year and agreements to purchase materials in the normal course of business are summarized as follows (in thousands):

<u>Description</u>	<u>Year Ending December 31,</u>	
	<u>2016</u>	<u>2017</u>
Purchase commitments	\$ 3,539	\$ -
Mortgage debt	239	2,874
Total	<u>\$ 3,778</u>	<u>\$ 2,874</u>

Litigation

In the normal course of business, we are subject, from time to time, to legal proceedings, lawsuits and claims. Such matters are subject to many uncertainties, and outcomes are not predictable with assurance. If any of these matters arise in the future, it could affect the operating results of any one or more quarters.

We expense costs of litigation related to contingencies in the periods in which the costs are incurred.

Concentrations

Our ten largest customers accounted for approximately 61.1% and 65.6% of revenues for the three months ended March 31, 2016 and 2015 respectively. For the three months ended March 31, 2016, McKesson, NDC, and Medline accounted for 20.2%, 10.5%, and 9.5% of our sales, while for the same three month period in 2015, McKesson, NDC, and Medline accounted for 18.9%, 13.8% and 11.0% of our sales.

NOTE 10. RELATED PARTY TRANSACTIONS

Several relatives of Nikolay Shilev, Bovie Bulgaria's Managing Director, are considered related parties. Teodora Shileva, Mr. Shilev's spouse is an employee of the company working in the Accounting department in Bulgaria. Antoaneta Dimitrova Shileva-Toromanova, Mr. Shilev's sister is the Manager of Production and Human Resources. Svetoslav Shilev, Mr. Shilev's son is an Engineer in the Quality Assurance department in Bulgaria.

A relative of Moshe Citronowicz, Bovie's Senior Vice President, is considered a related party. Arik Zoran is a consultant of the Company doing business as AR Logic, Inc., a consulting firm owned by Arik Zoran, Mr. Citronowicz's brother. On March 1, 2013 the Company amended the Consulting Services Agreement dated January 2011, extending the term of the existing agreement until December 31, 2014. The agreement shall automatically renew for additional one year periods, unless either party gives written notice of its desire not to renew at least one year prior to the expiration of the initial Term or renewal term. The agreement with AR Logic provides for a monthly retainer for engineering support for our existing generator product line and a separate hourly based fee structure for additional consulting related to new product lines. AR Logic has a royalty contract with us related to the creation and design of proprietary technology that is used in some of our generators. AR Logic was paid consulting fees of approximately \$30,000 and \$71,610 during the three months ended March 31, 2016 and 2015, respectively.

A second relative of Mr. Citronowicz is considered a related party. Yechiel Tsitrinovich is also a brother of Mr. Citronowicz, and acts as a consultant to the Company related to research and development of certain products. Mr. Tsitrinovich has a royalty contract with us related to the creation and design of a proprietary technology that is used in some of our generators. Mr. Tsitrinovich was paid a combination of consulting fees and royalties on previous product designs approximating \$22,828 and \$23,763 during the three months ended March 31, 2016 and 2015, respectively.

NOTE 11. LONG TERM DEBT

On March 20, 2014, the Company entered into a transaction with The Bank of Tampa, a Florida banking corporation ("Lender") wherein Lender extended to the Company a mortgage loan in the principal amount of \$3,592,000 (the "Loan"). The obligations under the Loan are secured by a first mortgage and security interest in the Company's Clearwater, Florida facility as well as an assignment of the Company's accounts receivable. In addition, the Company has pledged an interest in a certificate of deposit in the amount of \$839,000 as additional collateral. The amount of the additional collateral required declines on a pro rata basis as principal is paid. The initial maturity date of the Loan is March 20, 2017; however the Company has an option to extend the maturity date until March 20, 2022 if the Company complies with the provisions below.

Borrowings under the Loan bear interest at LIBOR plus 3.5%, with a fixed monthly principal payment of \$19,956. The interest rate at March 31, 2016 was 3.941%.

The Loan documents contain customary financial covenants, including a covenant that the Company maintains a minimum liquidity of \$750,000. Although there is no Debt Service Coverage Ratio (as defined in the Loan Agreement) for the initial term of the Loan, should we desire to extend the Loan beyond March 20, 2017, we must maintain a Debt Service Coverage Ratio for each of the preceding four quarters of not less than 1.0 to 1.0. At March 31, 2016, the calculation of our debt service ratio concluded that we will not be in compliance with the covenant to extend the maturity to March 20, 2022. Accordingly, we have reclassified our mortgage debt to a current liability.

NOTE 12. GEOGRAPHIC AND PRODUCT LINE INFORMATION

International sales represented approximately 14.9% of total revenues for the three months ending March 31, 2016, as compared with 14.7% of total revenues for the first three months of 2015.

Sales by Domestic and International (in 000's)	Three months ended March 31,	
	2016	2015
Domestic	\$ 6,615	\$ 5,225
International	1,160	903
Total	<u>\$ 7,775</u>	<u>\$ 6,128</u>

Although we have only one reporting segment, management analyzes revenue and other operating metrics across three operating categories.

Sales by Operating Category (in 000's)	Three months ended March 31,	
	2016	2015
Core	\$ 6,478	\$ 5,525
OEM	941	320
J-Plasma	356	283
Total	<u>\$ 7,775</u>	<u>\$ 6,128</u>

End of financial statements

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

You should read the following discussion and analysis in conjunction with our financial statements and related notes contained elsewhere in this report. This discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of a variety of factors discussed in this report and those discussed in other documents we file with the SEC. In light of these risks, uncertainties and assumptions, readers are cautioned not to place undue reliance on such forward-looking statements. These forward-looking statements represent beliefs and assumptions as of the date of this report. While we may elect to update forward-looking statements and at some point in the future, we specifically disclaim any obligation to do so, even if our estimates change. Past performance is no guaranty of future results.

Executive Level Overview

Bovie Medical Corporation ("Company", "Bovie Medical", "we", "us", or "our") was incorporated in 1982, under the laws of the State of Delaware and has its principal executive office at 4 Manhattanville Road, Suite #106, Purchase, New York 10577.

We are an energy-based medical device company specializing in developing, manufacturing, and marketing a range of electrosurgical products and technologies, as well as related medical products used in doctor's offices, surgery centers and hospitals worldwide. Our medical devices are marketed through Bovie's own well-respected brands (Bovie[®], J-Plasma[®], IDS[™] and ICON[™]) and on a private label basis to distributors throughout the world. The Company also leverages its expertise in the design, development and manufacturing of electrosurgical equipment by producing equipment for large, well-known medical device manufacturers as well as emerging medical start-ups, through original equipment manufacturing (OEM) agreements.

We are also the developer of J-Plasma[®], a patented plasma-based surgical product which we believe has the potential to be a transformational product for surgeons. J-Plasma utilizes a helium ionization process that produces a stable, focused beam of ionized gas that provides surgeons with greater precision, minimal invasiveness and an absence of conductive currents during surgery. While currently in the early stages of commercialization, J-Plasma has been the subject of eleven independent white papers and has been cited therein for its clinical utility in gynecological surgeries and dermatologic/facial plastic surgery procedures.

In March, 2015, the Company closed its previously-announced underwritten public offering of a total 5,218,749 shares of common stock, par value \$0.001 per share at a price to the public of \$2.50 per share, resulting in net proceeds of approximately \$11.5 million, after deducting underwriting discounts and commissions and estimated offering expenses. The Company intends to use the proceeds from the offering for operating costs, capital expenditures and for general corporate purposes, including working capital. Craig-Hallum Capital Group LLC ("Craig-Hallum") acted as the sole managing underwriter for the offering.

Concurrently with the underwriting, the Company closed on the transactions contemplated under the exchange agreement with certain investors (the "Investors") with respect to which Great Point Partners, LLC acts as investment manager. Pursuant to the terms of the Exchange Agreement, the Company issued 3,588,139 shares of the Company's Series B Convertible Preferred Stock (the "Series B Preferred Stock") in exchange for 3,500,000 shares of the Company's Series A 6% Convertible Preferred Stock and warrants to purchase up to 5,250,000 shares of our common stock in the aggregate which were previously issued in conjunction with the sale of the Company's Series A 6% Convertible Preferred Stock to the Investors in a December 13, 2013 offering, as well as accrued and unpaid preferred dividends. At March 31, 2016, the Series B Preferred Stock is convertible into an aggregate of 3,951,278 shares of the Company's common stock.

The majority of our products currently are marketed through medical distributors, which distribute to more than 6,000 hospitals and to doctors and other healthcare facilities. New distributors are contacted through responses to our advertising in international and domestic medical journals and our presence at domestic and international trade shows.

International sales represented approximately 14.9% of total revenues for the three months ending March 31, 2016, as compared with 14.7% of total revenues for the first three months of 2015. Management estimates our products have been sold in more than 150 countries through local dealers coordinated by sales and marketing personnel at our Clearwater, Florida facility. International sales of the company have remained flat, which management attributes to a stronger dollar relative to foreign currencies. In the Middle East and some Latin American countries, lower oil prices negatively impact government funded healthcare, and political and civil unrest in some countries make those markets increasingly volatile and unpredictable.

During 2014, we commenced full scale commercialization efforts for J-Plasma. As of March 31, 2016, we had a direct sales force consisting of 17 field-based selling positions, and that, coupled with our independent manufacturer's representatives, gives us a total sales force of 39. This is a hospital focused selling organization with its focus on the use of J-Plasma for operating room procedures. In addition, we have invested in training programs and marketing-related activities to support accelerated adoption of J-Plasma.

The Company continuously reviews and refines its marketing strategies and distribution channels regarding the commercialization of J-Plasma technology as well as initiatives to manage expenses and costs as appropriate for market conditions.

We strongly encourage investors to visit our website: www.boviemedical.com to view the most current news and to review our filings with the Securities and Exchange Commission.

Results of Operations – Three Months Ended March 31, 2016 Compared to Three Months Ended March 31, 2015

Sales

	Three months ended March 31,	
	2016	2015
<u>Sales by Product Line (in 000's)</u>		
Electrosurgical	\$ 4,252	\$ 3,738
Cauteries	1,834	1,526
Other	1,689	864
Total	\$ 7,775	\$ 6,128
<u>Sales by Domestic and International (in 000's)</u>		
Domestic	\$ 6,615	\$ 5,225
International	1,160	903
Total	\$ 7,775	\$ 6,128
<u>Sales by Operating Category (in 000's)</u>		
Core	\$ 6,478	\$ 5,525
OEM	941	320
J-Plasma	356	283
Total	\$ 7,775	\$ 6,128

Sales for the three months ended March 31, 2016 were approximately 26.9% higher than the same period in 2015. Core and OEM sales were up in all categories, except lighting. J-Plasma sales increased 25.8% over the same period in 2015.

Our ten largest customers accounted for approximately 61.1% and 65.6% of revenues for the three months ended March 31, 2016 and 2015 respectively. For the three months ended March 31, 2016, McKesson, NDC, and Medline accounted for 20.2%, 10.5%, and 9.5% of our sales, while for the same three month period in 2015, McKesson, NDC, and Medline accounted for 18.9%, 13.8% and 11.0% of our sales.

The Company continuously reviews and refines its marketing strategies and distribution channels regarding the commercialization of J-Plasma technology as well as initiatives to manage expenses and costs as appropriate for market conditions.

Gross Profit

	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
(in thousands)				
Cost of sales	\$ 4,452	3,454	57.3%	56.4%
Gross profit	\$ 3,323	2,674	42.7%	43.6%

Gross profit decreased as a percentage of sales by approximately 1.0% for the three month period ending March 31, 2016 compared to the same respective period in 2015.

We do not anticipate any material impact to our gross profit, material costs, or other costs as a result of the effect of inflation or any material impact of changing prices on net revenue.

Research and Development

	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
(in thousands)				
R & D Expense	\$ 668	446	8.6%	7.3%

Research and development costs increased 49.8% for the three month period ending March 31, 2016 compared to the same period in 2015. We have incurred increased spending on labor costs, consulting services and other costs as we continue to develop enhancements and complimentary items to our next generation of J-Plasma and core products.

Professional Fees

(in thousands)	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
Professional services	\$ 357	331	4.6%	5.4%

Our professional fees increased by approximately \$26,000 during the three months ended March 31, 2016 compared to the same period in 2015. The increase was mainly attributable to accounting and tax fees and consulting services, which were offset by a reduction in legal fees.

Salaries and related costs

(in thousands)	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
Salaries & related cost	\$ 2,100	1,952	27.0%	31.9%

During the three months ended March 31, 2016 compared to the same period in 2015, salary costs increased by 7.6% or approximately \$148,000. The increases were primarily a result of additional salaries, benefits and payroll taxes related in our human resources, quality, and research and development departments.

Selling, General & Administrative Expenses

(in thousands)	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
SG & A costs	\$ 2,191	2,217	28.2%	36.2%

Selling, general and administrative costs decreased by approximately \$26,000 or 1.2% for the three month period ending March 31, 2016 as compared to the same period in 2015. Increases in sales commissions, insurance expense, professional services, and trade show expenses, were offset by decreases in advertising and marketing expenses, dues and subscriptions, and regulatory expenses.

Other Income (expense)

Interest Expense

(in thousands)	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
Interest income (expense)	\$ (38)	(40)	-0.5%	-0.7%
Change in fair value of derivative liabilities	\$ 87	1,444	1.1%	23.6%

Change in Fair Value of Derivative Liabilities

At March 31, 2016, we had warrants valued at \$180,671 and we recognized an aggregate gain for the three months ended March 31, 2016 of \$86,660 related to their change in value.

Income Taxes

We have not recorded a tax provision for the three months ended March 31, 2016 as we have recorded a full valuation allowance against the net deferred tax assets with a finite life. A valuation allowance is required to be provided to reduce the deferred tax assets to a level which, more likely than not, will be realized. Management evaluated the positive and negative evidence in determining the realizability of the net deferred tax asset. In determining the need for valuation allowance, we reviewed historic operating results, the current period operating results, as well as future income forecasts based on the projections, management concluded that it was not more likely that the Company should realize its net deferred tax assets through future operating results and the reversal of taxable temporary differences. If in the future we determine that we will be able to realize any of the net deferred tax assets, we will make adjustment to the valuation allowance, which would increase our income in the period that the determination is made.

Net Income (loss)

(in thousands)	Three Months Ended		Percent of sales	
	March 31,			
	2016	2015	2016	2015
Net loss	\$ (1,944)	(876)	-25.0%	-14.3%
Accretion on convertible preferred stock	-	(222)	-	-3.6%
Gain on conversion of warrants and preferred shares, net	-	13,956	-	-
Net loss attributable to common shareholders	\$ (1,944)	12,858		

Product Development

We have developed most of our products and product improvements internally. Funds for this development have come primarily from our internal cash flow and equity issuances. We maintain close working relationships with physicians and medical personnel in hospitals and universities who assist in product research and development. New and improved products play a critical role in our sales growth. We continue to emphasize the development of proprietary products and product improvements to complement and expand our existing product lines. Our research and development team members are based in our Florida office and our facility in Sofia, Bulgaria.

Reliance on Collaborative, Manufacturing and Selling Arrangements

We manufacture the majority of our products on our premises in Clearwater, Florida. Labor-intensive sub-assemblies and labor-intensive products may be outsourced to our specification. Although we sell through distributors, we market our products through national trade journal advertising, direct mail, distributor sales representatives and trade shows, under the Bovie name, the Bovie/Aaron name and private label. Major distributors include Cardinal Health, Independent Medical Co-Op Inc. (IMCO), McKesson Medical Surgical, Inc., Medline, National Distribution and Contracting Inc. (NDC), and Owens & Minor. If any of these distributor relationships are terminated or not replaced, our revenue from the territories served by these distributors could be adversely affected.

We are also dependent on OEM customers who have no legal obligation to purchase products from us. Should such customers fail to give us purchase orders for the product after development, our future business and value of related assets could be negatively affected. Furthermore, no assurance can be given that such customers will give sufficient high priority to our products. Finally, disagreements or disputes may arise between us and our customers, which could adversely affect production and sales of our products.

We also have collaborative arrangements with three key foreign suppliers under which we request the development of certain items and components and we purchase them pursuant to purchase orders. Our purchase order commitments are never more than one year in duration and are supported by our sales forecasts. The majority of our raw materials are purchased from sole-source suppliers. While we believe we could ultimately procure other sources for these components, should we experience any significant disruptions in this key supply chain, there are no assurances that we could do so in a timely manner which could render us unable to meet the demands of our customers, resulting in a material and adverse effect on our business and operating results.

Liquidity and Capital Resources

Our working capital at March 31, 2016 of approximately \$13.3 million decreased by approximately \$4.6 million when compared to December 31, 2015. Accounts receivable days of sales outstanding were 35.5 days and 35.8 days at March 31, 2016 and 2015, respectively. The number of days worth of sales in inventory, which is the total inventory available for production divided by the 12 month average cost of materials, decreased 29 days to 212 days equating to an inventory turn ratio of 1.8 at March 31, 2016 from 241 days and an inventory turn ratio of 2.0 at March 31, 2015. The lower number of days worth of sales is due to higher sales turnover relative to increases in inventory levels year over year.

On March 17, 2015, we closed our underwritten public offering of 4,800,000 shares of common stock, par value \$0.001 per share at a price to the public of \$2.50 per share, resulting in net proceeds of approximately \$10.6 million, after deducting underwriting discounts and commissions and estimated offering expenses. We intend to use the proceeds from the offering for operating costs, capital expenditures and for general corporate purposes, including working capital. Craig-Hallum acted as the sole managing underwriter for the offering.

On March 31, 2015 Craig-Hallum exercised a portion of its over-allotment option to purchase an additional 418,749 shares of common stock at an aggregate price of \$2.50 per share, resulting in net proceeds of approximately \$900,000. After closing of the over-allotment, the total number of shares sold by the Company in the offering was 5,218,749.

We used cash in operations of approximately \$2.3 million for the three months ended March 31, 2016, compared to cash used in operations of approximately \$1.8 million for the same period in 2015, an increase of cash used in operations of approximately \$0.5 million which was largely attributable to inventory build for new product launches.

During the three month period ended March 31, 2016, we used approximately \$21,000 for the purchase of property and equipment as compared to purchases amounting to approximately \$254,000 for the same period in 2015.

Cash used in financing activities for the three month period ended March 31, 2016 of approximately \$60,000 was attributable to the reduction of mortgage note payable. Cash provided by financing activities for the three month period ended March 31, 2015 of approximately \$11.7 million was attributable to the proceeds from the public offering and the exercise of warrants.

On March 20, 2014, we entered into a transaction with The Bank of Tampa, a Florida banking corporation ("Lender") wherein Lender extended to us a mortgage loan in the principal amount of \$3,592,000 (the "Loan"). The obligations under the Loan are secured by a first mortgage and security interest in our Clearwater, Florida facility as well as an assignment of our accounts receivable. In addition, we have pledged an interest in a certificate of deposit in the amount of \$839,000 as additional collateral. The amount of the additional collateral required declines on a pro rata basis as principal is paid. The initial maturity date of the Loan is March 20, 2017; however we have an option to extend the maturity date until March 20, 2022 if we comply with the provisions below.

Borrowings under the Loan bear interest at LIBOR plus 3.5%, with a fixed monthly principal payment of \$19,956. The interest rate at March 31, 2016 was 3.941%.

The Loan documents contain customary financial covenants, including a covenant that the Company maintains a minimum liquidity of \$750,000. Although there is no Debt Service Coverage Ratio (as defined in the Loan Agreement) for the initial term of the Loan, should we desire to extend the Loan beyond March 20, 2017, we must maintain a Debt Service Coverage Ratio for each of the preceding four quarters of not less than 1.0 to 1.0. At March 31, 2016, the calculation of our debt service ratio concluded that we will not be in compliance with the covenant to extend the maturity to March 20, 2022. Accordingly, we have reclassified our mortgage debt to a current liability.

Our future contractual obligations for agreements with initial terms greater than one year and agreements to purchase materials in the normal course of business are summarized as follows (in thousands):

Description	Year Ending December 31,	
	2016	2017
Purchase commitments	\$ 3,539	\$ -
Mortgage debt	239	2,874
Total	<u>\$ 3,778</u>	<u>\$ 2,874</u>

We are continuing to make substantial investments in the development and marketing of our J-Plasma technology for the long term benefit of the Company and its stakeholders, and this may adversely affect our short term profitability and cash flow, particularly over the next 12 to 24 months. While we believe that these investments have the potential to generate additional revenues and profits in the future, there can be no assurance that J-Plasma will be successful or that such future revenues and profitability will be realized.

Critical Accounting Estimates

In preparing the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), we have adopted various accounting policies. Our most significant accounting policies are disclosed in Note 2 to the consolidated financial statements included in our report on Form 10-K for the year ended December 31, 2015, which we filed on March 18, 2016.

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Our estimates and assumptions, including those related to inventories, intangible assets, property, plant and equipment, legal proceedings, research and development, warranty obligations, product liability, fair valued liabilities, sales returns and discounts, and income taxes are updated as appropriate, which in most cases is at least quarterly. We base our estimates on historical experience, or various assumptions that are believed to be reasonable under the circumstances and the results form the basis for making judgments about the reported values of assets, liabilities, revenues and expenses. Actual results may materially differ from these estimates.

Estimates are considered to be critical if they meet both of the following criteria: (1) the estimate requires assumptions about material matters that are uncertain at the time the accounting estimates are made, and (2) other materially different estimates could have been reasonably made or material changes in the estimates are reasonably likely to occur from period to period. Our critical accounting estimates include the following:

Inventory reserves

When necessary, we maintain reserves for excess and obsolete inventory resulting from the potential inability to sell our products at prices in excess of current carrying costs. The markets in which we operate are highly competitive, with new products and surgical procedures introduced on an ongoing basis. Such marketplace changes may cause our products to become obsolete. We make estimates regarding the future recoverability of the costs of these products and record a provision for excess and obsolete inventories based on historical experience, and expected future trends. If actual product life cycles, product demand or acceptance of new product introductions are less favorable than projected by management, additional inventory write-downs may be required, which would unfavorably affect future operating results.

Long-lived assets

We review long-lived assets which are held and used, including property and equipment and intangible assets, for impairment whenever changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Such evaluations compare the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset over its expected useful life and are significantly impacted by estimates of future prices and volumes for our products, capital needs, economic trends and other factors that are inherently difficult to forecast. If the asset is considered to be impaired, we record an impairment charge equal to the amount by which the carrying value of the asset exceeds its fair value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique.

Liabilities valued at fair value

Certain financial instruments, such as warrants, which are indexed to our common stock, are classified as liabilities when either: (a) the holder possesses rights to net-cash settlement or (b) physical or net-share settlement is not within our control. In such instances, net-cash settlement is assumed for financial accounting and reporting purposes, even when the terms of the underlying contracts do not provide for net-cash settlement. Such financial instruments are initially recorded, and continuously carried, at fair value (see Note 5 of the consolidated financial statements).

Determining the fair value of these instruments involves judgment and the use of certain relevant assumptions including, but not limited to, interest rate risk, historical volatility and stock price, estimated life of the derivative, anti-dilution provisions, and conversion/redemption privileges. The use of different assumptions or changes in those assumptions could have a material effect on the estimated fair value amounts.

Stock-based compensation

Under our stock option plan, options to purchase common shares of the Company may be granted to key employees, officers and directors of the Company by the Board of Directors. The Company accounts for stock options in accordance with FASB ASC Topic 718-10-10, with compensation expense amortized over the vesting period based on the trinomial lattice option-pricing model fair value on the grant date, which includes a number of estimates that affect the amount of our expense.

Litigation Contingencies

From time to time, we are exposed to claims and litigation arising in the ordinary course of business and use various methods to resolve these matters in a manner that we believe serves the best interest of the Company and our stockholders. There can be no assurance these actions or other third party assertions will be resolved without costly litigation, or in a manner that is not adverse to our financial position. We do not believe that any of the currently identified claims or litigation matters will have a material adverse impact on our results of operations, cash flows or financial condition. However, given uncertainties associated with any litigation, if our assessments prove to be wrong, or if additional information becomes available such that we estimate that there is a possible loss or possible range of loss associated with these contingencies, then we would record the minimum estimated liability, which could materially impact our results of operations, financial position and cash flows.

Income taxes

We utilize the liability method of accounting for income taxes as set forth in FASB ASC 740. Under the liability method, deferred taxes are determined based on the temporary differences between the financial statement and tax basis of assets and liabilities using tax rates expected to be in effect during the years in which the basis differences reverse. Management evaluated the positive and negative evidence in determining the realizability of the net deferred tax asset. In determining the need for valuation allowance, we reviewed historic operating results, updated current period actual results, as well as future income forecasts based on the projections, management concluded that it was not more likely that the Company should realize its net deferred tax assets through future operating results and the reversal of taxable temporary differences.

If in the future we determine that we will be able to realize any of the net deferred tax assets, we will make adjustment to the valuation allowance, which would increase our income in the period that the determination is made.

We assess our income tax positions and record tax benefits for all years subject to examination based upon our evaluation of the facts, circumstances and information available as of the reporting date. For those tax positions where there is a greater than 50% likelihood that a tax benefit will be sustained, we have recorded the largest amount of tax benefit that may potentially be realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where there is less than 50% likelihood that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

Inflation

Inflation has not materially impacted the operations of our Company.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements at this time.

Recent Accounting Pronouncements

See Note 4 of the consolidated financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our short-term investments consist of cash, cash equivalents and overnight investments. As such we do not believe we are exposed to significant interest rate risk. The primary objective of our investment activities is to preserve principal while at the same time maximizing yields without significantly increasing risk. If a 10% change in interest rates were to have occurred on March 31, 2016, this change would not have had a material effect on the fair value of our investment portfolio as of that date.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We have carried out an evaluation, under the supervision of and with the participation of our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended), as of March 31, 2016. Based upon that evaluation, our CEO and CFO concluded that, as of the end of that period, our disclosure controls and procedures are effective in providing reasonable assurance that (a) the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (b) such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Controls

There were no changes in our internal control over financial reporting (as defined in Rules 13(a)-15(f) and 15(d)-15(f)) during the three months ended March 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

In the normal course of business, we are subject, from time to time, to legal proceedings, lawsuits and claims. Such matters are subject to many uncertainties, and outcomes are not predictable with assurance. If any of these matters arise in the future, it could affect the operating results of any one or more quarters.

We expense costs of litigation related to contingencies in the periods in which the costs are incurred.

ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors previously disclosed in our Form 10-K for the year ended December 31, 2015, in response to Item 1A to Part 1 of Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

- | | |
|-------|--|
| 31.1 | Certifications of Robert L. Gershon, Chief Executive Officer of Registrant pursuant to Rule 13a-14 adopted under the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002. |
| 31.2 | Certifications of Jay D. Ewers, Chief Financial Officer of Registrant pursuant to Rule 13a-14 adopted under the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley act of 2002. |
| 32.1 | Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 32.2 | Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 101.1 | Financial Statements from the Quarterly Report on Form 10-Q of Bovie Medical Corporation for the three months ended March 31, 2016, filed on May 11, 2016, formatted in XBRL. |

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.

Bovie Medical Corporation

Dated: May 11, 2016

By: /s/ Robert L. Gershon
Robert L. Gershon
Chief Executive Officer
(Principal Executive Officer)

Dated: May 11, 2016

By: /s/ Jay D. Ewers
Jay D. Ewers
Chief Financial Officer, Treasurer, and Secretary
(Principal Financial Officer)

**Certificate Pursuant to Section 302
of Sarbanes – Oxley Act of 2002
CERTIFICATION OF CEO**

I, Robert L. Gershon, the Registrant's Chief Executive Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Bovie Medical Corporation;
2. Based on my knowledge, this quarterly 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 quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;
4. The registrant's other certifying officer(s) 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 liability 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) Designed 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 officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 11, 2016

By: /s/ Robert L. Gershon

Robert L. Gershon
Chief Executive Officer

**Certificate Pursuant to Section 302
of Sarbanes – Oxley Act of 2002
CERTIFICATION OF CFO**

I, Jay D. Ewers, the Registrant's Chief Financial Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Bovie Medical Corporation;
2. Based on my knowledge, this quarterly 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 quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;
4. The registrant's other certifying officer(s) 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 liability 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) Designed 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 officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 11, 2016

By: /s/ Jay D. Ewers
Jay D. Ewers
Chief Financial Officer

**Certificate Pursuant to Section 906
of Sarbanes – Oxley Act of 2002
CERTIFICATION OF CEO**

In connection with the quarterly report on Form 10-Q of Bovie Medical Corporation. (the "*Company*") for the period ended March 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "*Report*"), the undersigned President and Chief Executive Officer certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 11, 2016

By: /s/ Robert L. Gershon
Robert L. Gershon
Chief Executive Officer

**Certificate Pursuant to Section 906
of Sarbanes – Oxley Act of 2002
CERTIFICATION OF CFO**

In connection with the quarterly report on Form 10-Q of Bovie Medical Corporation. (the "*Company*") for the period ended March 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "*Report*"), the undersigned Chief Financial Officer certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 11, 2016

By: /s/ Jay D. Ewers
Jay D. Ewers
Chief Financial Officer