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

FORM 10-Q

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

For Quarter Ended March 31, 2010

Commission File Number 021-74972

BIOELECTRONICS CORPORATION

(Exact name of registrant as specified in its charter)

Maryland  
(State or other jurisdiction of  
incorporation or organization)

52-2278149  
(I.R.S. employer  
identification number)

4539 Metropolitan Court  
Frederick, Maryland 21704  
(Address of principal executive offices and zip code)

Phone: 301.874.4890  
Fax: 301.874.6935  
(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 Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such returns), (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 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

Number of shares of common stock, issued and outstanding as of May 11, 2010 is 1,471,998,871.

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**BIOELECTRONICS CORPORATION  
FORM 10-Q**

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**PART I – FINANCIAL INFORMATION**

**Item 1. Financial Statements.**

**BioElectronics Corporation (A Development Stage Company)  
Condensed Balance Sheets**

	March 31, 2010 (Unaudited)	December 31, 2009
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 93,561	\$ 296,352
Trade and other receivables, net	89,591	402,003
Trade receivables assigned to related party, net	503,136	-
Trade receivable from related parties	109,970	165,297
Inventory	357,478	201,359
Prepaid expenses and others	157,802	102,635
Total current assets	<u>1,311,538</u>	<u>1,167,646</u>
Property and equipment	138,319	93,502
Less: Accumulated depreciation	(84,873)	(79,921)
Property and equipment, net	<u>53,446</u>	<u>13,581</u>
Total assets	<u>\$ 1,364,984</u>	<u>\$ 1,181,227</u>
<b>Liabilities and stockholders' deficiency</b>		
Current liabilities:		
Accounts payable	\$ 193,620	\$ 85,661
Accrued expenses	57,579	43,241
Notes payable	2,711	12,654
Financing of receivables with related party	53,584	-
Total current liabilities	307,494	141,556
Long-term liabilities:		
Related party notes payable	<u>2,298,197</u>	<u>1,824,176</u>
Total liabilities	<u>2,605,691</u>	<u>1,965,732</u>
Commitments and contingencies		
Stockholders' deficiency:		
Common stock, par value \$0.001 per share, 1,500,000,000 shares authorized at March 31, 2010 and December 31, 2009 and 1,471,998,871 and 1,470,998,871 shares issued and outstanding at March 31, 2010 and December 31, 2009, respectively	1,471,999	1,470,999
Additional paid-in capital	8,446,426	8,408,986
Deficit accumulated during the development stage	<u>(11,159,132)</u>	<u>(10,664,490)</u>
Total stockholders' deficiency	<u>(1,240,707)</u>	<u>(784,505)</u>
Total liabilities and stockholders' deficiency	<u>\$ 1,364,984</u>	<u>\$ 1,181,227</u>

The accompanying notes are an integral part of these condensed financial statements.

**BioElectronics Corporation (A Development Stage Company)**  
**Condensed Statements of Operations**  
**(Unaudited)**

	For the three months ended March 31,		Period from April
	2010	2009	10, 2000
			(Inception) to
			March 31, 2010
Sales	\$ 281,767	\$ 294,581	\$ 3,733,351
Cost of Goods Sold	121,063	75,883	1,635,556
Gross profit	160,704	218,698	2,097,795
General and Administrative Expenses:			
Depreciation and Amortization	6,771	3,645	103,484
Investor Relations Expenses	45,899	5,390	1,640,460
Legal and Accounting Expenses	200,936	18,698	983,987
Sales Support Expenses	71,767	93,792	1,499,697
Other General and Administrative Expenses	300,575	138,866	7,486,709
Total General and Administrative Expenses	625,948	260,391	11,714,337
Loss from Operations	(465,244)	(41,693)	(9,616,542)
Interest Expense and Other:			
Interest Expense	(29,398)	(19,797)	(1,506,738)
Loss on Disposal of Assets	-	-	(35,852)
Total Interest Expense and Other	(29,398)	(19,797)	(1,542,590)
Loss Before Income Taxes	(494,642)	(61,490)	(11,159,132)
Provision for Income Tax Expense	-	-	-
Net loss	\$ (494,642)	\$ (61,490)	\$ (11,159,132)
Net loss Per Share - Basic and Diluted	\$ (0.00)	\$ (0.00)	N/A
Weighted Average Number of Shares Outstanding - Basic and Diluted	1,471,332,204	400,727,694	N/A

The accompanying notes are an integral part of these condensed financial statements.

**BioElectronics Corporation (A Development Stage Company)**  
**Condensed Statements of Cash Flows**  
 (Unaudited)

	For the three months ended March 31, 2010	2009	Period from April 10, 2000 (Inception) to March 31, 2010
<b>Cash flows from Operating Activities:</b>			
Net loss	\$ (494,642)	\$ (61,490)	\$ (11,159,132)
Adjustment to Reconcile Net Loss to			
Net Cash Used In Operating Activities:			
Depreciation and amortization	6,771	3,645	105,055
Provision for bad debts	-	-	58,255
Amortization of non-cash debt issuance costs	-	-	725,373
Non-cash expenses	-	649	1,455,978
Stock-based employee compensation expense	36,190	-	74,131
Non-cash interest related to notes payable	-	5,017	592,418
Non-cash interest related to related party notes payable	29,021	14,780	116,724
Adjustment of related party notes payable	-	77,397	(266,490)
Amortization of loan costs	-	-	129,852
Increase in related party notes payable for services rendered	-	-	562,776
Loss on disposal of property and equipment	-	-	35,852
Changes in Assets and Liabilities			
(Increase) Decrease in:			
Trade and other receivables	346,203	(62,011)	(279,350)
Trade receivables assigned to related party	(536,927)	-	(536,927)
Inventory	(156,119)	(74,422)	(357,478)
Trade receivable from related parties	55,327	-	55,327
Prepaid expenses and others	(56,986)	(1,152)	(146,966)
Increase (Decrease) in:			
Accounts payable	107,959	(38,609)	333,868
Accrued expenses	16,588	(3)	268,271
Customer deposits	-	(79,376)	-
<b>Net cash used in operating activities</b>	<b>(646,615)</b>	<b>(215,575)</b>	<b>(8,232,463)</b>
<b>Cash flows from Investing Activities</b>			
Acquisition of property and equipment	(44,817)	-	(173,546)
<b>Net cash Used in Investing Activities</b>	<b>(44,817)</b>	<b>-</b>	<b>(173,546)</b>
<b>Cash flows from Financing Activities</b>			
Proceeds from note payable, net of loan costs of \$10,000	-	-	1,090,148
Payments on note payable	(9,943)	(51,000)	(538,162)
Proceeds from related party notes payable	445,000	96,600	5,249,953
Proceeds from financing of receivables with related party	64,916	-	64,916
Payments on related party notes payable	-	(8,600)	(969,803)
Payments for financing of receivables with related party	(11,332)	-	(11,332)
Proceeds from issuance of common stock	-	147,000	3,623,837
Other	-	-	(9,987)
<b>Net cash provided by financing activities</b>	<b>488,641</b>	<b>184,000</b>	<b>8,499,570</b>
<b>Net increase (Decrease) in cash</b>	<b>(202,791)</b>	<b>(31,575)</b>	<b>93,561</b>
<b>Cash- Beginning of Period</b>	<b>296,352</b>	<b>55,278</b>	<b>-</b>
<b>Cash- End of Period</b>	<b>\$ 93,561</b>	<b>\$ 23,703</b>	<b>\$ 93,561</b>
<b>Supplemental Disclosures of Cash Flow Information:</b>			
Cash paid during the periods for:			
Interest	\$ 377	\$ -	\$ 67,009
Supplemental Schedule of Non-Cash Investing and Financing Activities:			
Conversion of debt and accrued interest into common stock	\$ -	\$ 163,640	N/A
Issuance of common stock from accrued expense	\$ 2,250	\$ -	2,250
Conversion of warrants into common stock	\$ -	\$ -	\$ 5,336
Prepaid insurance expense through issuance of notes	\$ -	\$ -	\$ 12,654
Equipment purchases financed through capital leases and notes payable	\$ -	\$ -	\$ 9,986

The accompanying notes are an integral part of these condensed financial statements.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 1 - BASIS OF PRESENTATION**

The unaudited condensed financial statements included herein have been prepared by BioElectronics Corporation (the "Company", "we" or "us"), a Maryland corporation without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. The financial statements reflect all adjustments that are, in the opinion of management, necessary to fairly state such information. All such adjustments are of a normal recurring nature. Although the Company believes that the disclosures are adequate to make the information presented not misleading, certain information and footnote disclosures, including a description of significant accounting policies normally 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.

The year-end condensed balance sheet data were derived from audited financial statements but do not include all disclosures required by accounting principles generally accepted in the United States of America. Certain reclassifications were made to the prior year financial statement amounts to conform to current year presentation. These financial statements should be read in conjunction with the audited financial statements and accompanying notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2009, as filed with the SEC on March 31, 2010.

The independent registered public accounting firm's report on the financial statements for the fiscal year ended December 31, 2009 states that because of recurring substantial losses from operations and a deficit accumulated during the development stage, there is substantial doubt about the Company's ability to continue as a going concern. A "going concern" opinion indicates that the financial statements have been prepared assuming the Company will continue as a going concern and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**DEVELOPMENT STAGE COMPANY**

As defined by ASC Topic 915, "Development Stage Entities" (formerly SFAS 7, "Accounting and Reposting by Development Stage Enterprises"), the Company is devoting substantially all of its present efforts to developing its business. Additionally, the Company has not yet commenced one of its planned principal activities, the sales of products in the U.S. retail market. All losses accumulated since inception have been considered as part of the Company's development stage activities. Costs of start-up activities, including organizational costs, are expensed as incurred.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**TRADE RECEIVABLES**

The Company maintains reserves on customer accounts where estimated losses may result from the inability of its customers to make required payments. These reserves are determined based on a number of factors, including the current financial condition of specific customers, the age of trade and other receivable balances and historical loss rate. The allowance for doubtful accounts was \$33,791 at both March 31, 2010 and December 31, 2009. Bad debt expense for the three months ended March 31, 2010 and March 31, 2009 were both \$0.

**ADVERTISING COSTS**

The Company expenses the costs associated with advertising as incurred. Costs incurred to fund the production of advertisements are reported as a prepaid expense if the related advertisement has not yet been broadcast. Prepaid advertising cost incurred to fund the production of Infomercials was \$43,196 and \$34,014 at March 31, 2010 and December 31, 2009, respectively. During the three months ended March 31, 2010, \$1,819 of Infomercials costs were amortized. Amortization costs for the three months ended March 31, 2009 were \$0.

**ISSUANCE OF STOCK FOR NON-CASH CONSIDERATION**

All issuances of the Company's stock for non-cash consideration are assigned a per share amount based on either the market value of the shares issued or the value of consideration received, whichever is more readily determinable. The majority of the non-cash consideration pertains to services rendered by consultants and others. The fair value of the services received was used to record the related expense and value attributed to the shares issued. On March 18, 2010, the Company issued 1,000,000 common shares to a consultant in respect of services provided in the year ended December 31, 2009. The shares were valued at \$0.00225 per share (or \$2,250 in aggregate) and were issued in payment of accrued liability related to services rendered by a consultant in 2009.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**RECENT ACCOUNTING PRONOUNCEMENTS**

*Disclosure of Fair Value Measurements*

In January 2010, the Financial Accounting Standards Board (“FASB”) issued a final Accounting Standards Update (“ASU”) that sets forth additional requirements and guidance regarding disclosures of fair value measurements. The ASU requires the gross presentation of activity within the Level 3 fair value measurement roll forward and details of transfers in and out of Level 1 and Level 2 fair value measurements. It also clarifies two existing disclosure requirements within the current fair value authoritative guidance on the level of disaggregation of fair value measurements and disclosures on inputs and valuation techniques. The new requirements and guidance are effective for interim and annual periods beginning after December 15, 2009, which for us means our first quarterly period ending on March 31, 2010, except for the Level 3 roll forward requirements which is effective for interim and annual periods beginning after December 15, 2010, which for us means our first quarterly period ending on March 31, 2011. The adoption of the disclosures effective this quarter did not have an impact on our financial position, results of operations or cash flows. Additionally, we do not expect the adoption of the disclosures which were deferred until the first quarter 2011 to have an impact on our financial position, results of operations or cash flows.

*Stock Based Compensation*

ASU 2010-13 provides amendments to Topic 718 to clarify that an employee share-based payment award with an exercise price denominated in the currency of a market in which a substantial portion of the entity's equity securities trades should not be considered to contain a condition that is not a market, performance, or service condition. Therefore, an entity would not classify such an award as a liability if it otherwise qualifies as equity. The amendments in ASU 2010-13 are effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2010 and are not expected to have a significant impact on the Company's financial statements.

*Accounting for the Transfers of Financial Assets*

In June 2009, the FASB issued new guidance relating to the accounting for transfers of financial assets. The new guidance, which was issued as SFAS No. 166, *Accounting for Transfers of Financial Assets, an amendment to SFAS No. 140*, was adopted into Codification in December 2009 through the issuance of Accounting Standards Updated (“ASU”) 2009-16. The new standard eliminates the concept of a “qualifying special-purpose entity,” changes the requirements for derecognizing financial assets, and requires additional disclosures in order to enhance information reported to users of financial statements by providing greater transparency about transfers of financial assets, including securitization transactions, and an entity's continuing involvement in and exposure to the risks related to transferred financial assets. The new guidance is effective for fiscal years beginning after November 15, 2009. The Company does not expect that the provisions of the new guidance will have a material effect on its financial statements.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

*Accounting for Variable Interest Entities*

In June 2009, the FASB issued revised guidance on the accounting for variable interest entities. The revised guidance, which was issued as SFAS No. 167, *Amending FASB Interpretation No. 46(R)*, was adopted into Codification in December 2009 through the issuance of ASU 2009-17. The revised guidance amends FASB Interpretation No. 46(R), *Consolidation of Variable Interest Entities*, in determining whether an enterprise has a controlling financial interest in a variable interest entity. This determination identifies the primary beneficiary of a variable interest entity as the enterprise that has both the power to direct the activities of a variable interest entity that most significantly impacts the entity's economic performance, and the obligation to absorb losses or the right to receive benefits of the entity that could potentially be significant to the variable interest entity. The revised guidance requires ongoing reassessments of whether an enterprise is the primary beneficiary and eliminates the quantitative approach previously required for determining the primary beneficiary. The Company does not expect that the provisions of the new guidance will have a material effect on its financial statements.

*Revenue Recognition*

In October 2009, the FASB issued ASU 2009-13, *Multiple-Deliverable Revenue Arrangements*. The new standard changes the requirements for establishing separate units of accounting in a multiple element arrangement and requires the allocation of arrangement consideration to each deliverable based on the relative selling price. The selling price for each deliverable is based on vendor-specific objective evidence ("VSOE") if available, third-party evidence if VSOE is not available, or estimated selling price if neither VSOE or third-party evidence is available.

ASU 2009-13 is effective for revenue arrangements entered into in fiscal years beginning on or after June 15, 2010. The Company does not expect that the provisions of the new guidance will have a material effect on its financial statements.

In October 2009, the FASB issued Accounting Standards Update No. 2009-14, "Certain Revenue Arrangements That Include Software Elements" ("ASU No. 2009-14"). ASU No. 2009-14 amends guidance included within ASC Topic 985-605 to exclude tangible products containing software components and non-software components that function together to deliver the product's essential functionality. Entities that sell joint hardware and software products that meet this scope exception will be required to follow the guidance of ASU No. 2009-13. ASU No. 2009-14 is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Early adoption and retrospective application are also permitted. The Company does not expect that the provisions of the new guidance will have a material effect on its financial statements.

*Subsequent Events*

ASU 2010-09 amends ASC Subtopic 855-10, "Subsequent Events – Overall" ("ASC 855-10") and requires an SEC filer to evaluate subsequent events through the date that the financial statements are issued but removed the requirement to disclose this date in the notes to the entity's financial statements. The amendments are effective upon issuance of the final update and accordingly, the Company has adopted the provisions of ASU 2010-09 during the quarter ended March 31, 2010. The adoption of these provisions did not have a significant impact on the Company's financial statements.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 3 – GOING CONCERN**

The Company's financial statements have been prepared on a going concern basis which contemplates the realization of assets and the liquidation of liabilities in the ordinary course of business. The Company has incurred substantial losses from operations. The Company sustained a net loss of \$494,642 for the three months ended March 31, 2010. The Company is currently seeking financing to provide the needed funds for operations. However, the Company can provide no assurance that it will be able to obtain the financing it needs to continue its efforts for market acceptance, obtain U.S. FDA approval, maintain operations and alleviate doubt about its ability to continue as a going concern.

**NOTE 4 - INVENTORY**

The components of inventory as of March 31, 2010 and December 31, 2009 are:

	<u>March 31, 2010</u>	<u>December 31, 2009</u>
Raw materials	\$ 69,961	\$ 27,900
Finished goods	287,517	173,459
	<u>\$ 357,478</u>	<u>\$ 201,359</u>

**NOTE 5 – PROPERTY AND EQUIPMENT**

Property and equipment consists of the following at March 31, 2010 and December 31, 2009:

	<u>March 31, 2010</u>	<u>December 31, 2009</u>
Machinery & Equipment	\$ 131,437	\$ 86,620
Leasehold improvements	6,882	6,882
	138,319	93,502
Less: accumulated depreciation	(84,873)	(79,921)
Total property and equipment, net	<u>\$ 53,446</u>	<u>\$ 13,581</u>

Depreciation expense on property and equipment amounted to \$4,952 and \$3,645 for the three months ended March 31, 2010 and March 31, 2009, respectively.

**NOTE 6 – INSURANCE PREMIUM FINANCING**

During 2009, the Company entered into an insurance premium financing agreement with an independent company to purchase insurance policies for directors' and officers' liability, general liability and product liability. The annual interest rate was 6.26%. The remaining balance of the amount financed was \$12,654 as of December 31, 2009 and \$9,943 payment was made during the three months ended March 31, 2010. The interest expense for this note was \$100 for the three months ended March 31, 2010. The outstanding payable balance at March 31, 2010 was \$2,711, which is due in full by May 31, 2010.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 7 – FINANCING OF RECEIVABLES WITH RELATED PARTY**

The Company entered into an agreement (the “Agreement”) on March 5, 2010, with Jarenz LLC (“Jarenz”), a related party, pursuant to which Jarenz is providing accounts receivable financing and collection services to the Company.

The Agreement provides for the Company to assign certain accounts receivable balances to Jarenz in exchange for a Cash Advance Amount of up to 80% of the face value of the receivables transferred; such amount determined upon discussions between the parties. Following collection of the related receivable, Jarenz pays the balance thereof to BioElectronics minus the initial down payment and a discount fee earned by Jarenz.

Jarenz’s discount fee is a percentage, between 1% to 9.5%, of the Cash Advance Amount based upon the number of days elapsing between the date of purchase by Jarenz and the date of collection of the related accounts receivable.

The Company accounts for transactions under the Agreement as secured borrowings since the Company has not surrendered control of the transferred accounts receivable to Jarenz under the Agreement. The Company reports the proceeds received from Jarenz as a current liability. The discount fee and any subsequent interest payments are recorded as interest expense in the Statement of Operations. The accounts receivable balance at March 31, 2010 includes receivables amounting to \$536,927 which have been assigned to Jarenz under the Agreement. The Company recorded an allowance for doubtful accounts of \$33,791 against this receivable as of March 31, 2010.

As at March 31, 2010, Jarenz received \$85,247 from the assigned receivables which was not yet forwarded to the Company. Interest expense of \$277 was recorded for the three months ended March 31, 2010. Jarenz is a limited liability company, whose owner is the daughter of the President of the Company.

**NOTE 8 – RELATED PARTY NOTES PAYABLE**

On January 1, 2005, the Company entered into an unsecured revolving convertible promissory note agreement (“the Revolver”) with IBEX, LLC (“IBEX”) a related party, for a maximum limit of \$2,000,000, with interest at the Prime Rate plus 2% (5.25% for the three months ended March 31, 2010), and all accrued interest and principal due on or before January 1, 2015, whether by the payment of cash or by conversion into shares of the Company’s common stock. The Revolver is convertible at various conversion prices based on the VWAP for the 10 trading days preceding the date of conversion. IBEX, LLC is a limited liability company, whose President is the daughter of the President of the Company. The balance of the Revolver was \$1,304,626 as at March 31, 2010.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 8 – RELATED PARTY NOTES PAYABLE (CONTINUED)**

In addition to the Revolver as described above, on August 1, 2009, the Company entered into a convertible promissory note agreement with IBEX, for \$519,920, with simple interest at 8% per annum. All accrued interest and principal are due on or before August 31, 2011, whether by the payment of cash or by conversion into shares of the Company's common stock. The promissory note is convertible equal to the quotient of (i) a sum equal to the entire outstanding principal and interest, divided by (ii) the conversion price of \$.019 per share. According to the Security Agreement dated August 1, 2009, the Company grants IBEX a security interest in, all of the right, title, and interest of the Company, in and to all of the Company's personal property and intellectual property, and all proceeds or replacements as collaterals.

On February 9, 2010, the Company entered into a convertible promissory note agreement with IBEX, for \$135,000, with simple interest at 8% per annum. All accrued interest and principal are due on or before February 2, 2012, whether by the payment of cash or by conversion into shares of the Company's common stock. The promissory note is convertible equal to the quotient of (i) a sum equal to the entire outstanding principal and interest, divided by (ii) the conversion price of \$.01 per share. According to the Security Agreement dated February 9, 2010, the Company grants IBEX a security interest in, all of the right, title, and interest of the Company, in and to all of the Company's personal property and intellectual property, and all proceeds or replacements as collaterals.

On March 31, 2010, the Company entered into a convertible promissory note agreement with IBEX, for \$310,000, with simple interest at 8% per annum. All accrued interest and principal are due on or before March 31, 2012, whether by the payment of cash or by conversion into shares of the Company's common stock. The promissory note is convertible equal to the quotient of (i) a sum equal to the entire outstanding principal and interest, divided by (ii) the conversion price of \$.01 per share.

Total interest expense incurred on the related party notes payable for the three months ended March 31, 2010 and 2009 was \$29,021 and \$14,780, respectively.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 9 – LOSS PER SHARE**

The following table sets forth the computation of basic and diluted share data:

	<b>Three months ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
<b>Common Stock:</b>		
Weighted average number of shares outstanding – basic	1,471,332,204	400,727,694
Effect of dilutive securities:		
Options and Warrants	-	-
Weighted average number of shares outstanding – diluted	1,471,332,204	400,727,694
Options and Warrants not included above (anti-dilutive)		
Options to purchase common stock	51,550,000	350,000
Warrants to purchase common stock	332,000	4,844,444
	<u>51,882,000</u>	<u>5,194,444</u>

**NOTE 10 – SHARE BASED COMPENSATION**

On November 30, 2004, as amended March 22, 2005, the Company adopted the BioElectronics Equity Incentive Plan ("the Plan"), for the purpose of providing incentives for officers, directors, consultants and key employees to promote the success of the Company, and to enhance the Company's ability to attract and retain the services of such persons. The Plan initially reserved 10 million shares of common stock for issuance, which was amended to 100 million shares on March 1, 2010. The issuance can be in the forms of options or shares. The options may be incentive, nonqualified or stock appreciation rights. The shares may be issued for performance.

As of March 31, 2010, the Company had 40,365,000 shares available for future grant under the Plan.

*Restricted Stock*

The following table is a summary of activity related to restricted stock grants to directors, consultants and key employees for the three months ended March 31, 2010:

Restricted shares granted	<b>53,750,000</b>
Weighted average grant date fair value per share	<b>\$ 0.01515</b>
Aggregate grant date fair value	<b>\$ 814,045</b>
Restricted shares forfeited	-
Vesting service period of shares granted	<b>3 years</b>
Grant date fair value of shares vested	\$ -

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 10 – SHARE BASED COMPENSATION (CONTINUED)**

Compensation expense related to the fair value of these awards is recognized straight-line over the requisite service period based on those restricted stock grants that ultimately vest. The fair value of grants is measured by the market price of the Company's common stock on the date of grant and then applied a liquidity discount of 50 percent. This discount rate is determined by analyzing the Company's liquidity history and using peer company data to estimate. Restricted stock awards generally vest ratably over the service period beginning with the first anniversary of the grant date.

There was no restricted stock outstanding as at March 31, 2009.

The Company adopted the provisions of SFAS No. 123R in the beginning of 2006. SFAS No. 123R requires that compensation cost relating to share-based payment transactions be recognized as an expense over the service period or vesting term. Accordingly, compensation costs recognized for the restricted stock for the three months ended March 31, 2010 and 2009 totaled \$36,190 and \$0, respectively.

*Stock Options*

Option awards are granted with an exercise price equal to Company's bid price on the Pink Sheets on the date of grant, which is fair value. The options vest over three years of continuous service and are exercisable over ten years from the date of grant.

There were no grants, exercises or expirations of options during the three months ended March 31, 2010.

Summary information about the Company's stock options outstanding at March 31, 2010:

<u>Exercise Price</u>	<u>Options Outstanding</u>	<u>Weighted Average Remaining Years of Contractual Life</u>	<u>Weighted Average Exercise Price</u>	<u>Options Exercisable</u>
\$ 0.300	350,000	0.75	\$ 0.300	350,000

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 11 - WARRANTS**

There were no grants, exercises or expirations of warrants during the three months ended March 31, 2010.

The following table summarizes the characteristics of the outstanding warrants as at March 31, 2010:

Exercise Price	Number	Original Term (Years)	Options outstanding weighted average remaining life in years
\$ 0.33	332,000	5	0.42

**NOTE 12 – FAIR VALUE MEASUREMENTS**

The Company's financial instruments consist primarily of cash, receivables, accounts payable and notes payable. The carrying amounts of such financial instruments approximate their respective estimated fair value due to the short-term maturities and/or approximate market interest rates of these instruments. The estimated fair value is not necessarily indicative of the amounts the Company would realize in a current market exchange or from future earnings or cash flows.

**NOTE 13 – INCOME TAXES**

The Company has not provided for income tax expense for the three months ended March 31, 2010 because of a significant net operating loss carry-forward of approximately \$4.6 million. A full valuation allowance has been recorded against the deferred tax asset resulting from the benefits associated with the net operating loss carry-forward.

**NOTE 14 – COMMITMENTS AND CONTINGENCIES LITIGATION**

*General*

In the ordinary course of conducting its business, the Company may become involved in various legal actions and other claims, some of which are currently pending. Litigation is subject to many uncertainties and management may be unable to accurately predict the outcome of individual litigated matters. Some of these matters may possibly be decided unfavorably towards the Company.

The Company is involved, on a continuing basis, in monitoring our compliance with environmental laws and in making capital and operating improvements necessary to comply with existing and anticipated environmental requirements. While it is impossible to predict with certainty, management currently does not foresee such expenses in the future as having a material effect on the business, results of operations, or financial condition of the Company.

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 14 – COMMITMENTS AND CONTINGENCIES LITIGATION (CONTINUED)**

William Lyons v. BioElectronics Corporation

In 2005, a lawsuit was filed against the Company by William Lyons for alleged breach of contract and conversion claims associated with fees for services provided to the Company. Mr. Lyons alleged that Andrew Whelan, the president of the Company, the Company, and PAW II, a Maryland limited liability company, (collectively, “the Defendants”) reached an agreement to convey stock to Mr. Lyons. The defendants deny that any such agreement was in place or that Mr. Lyons had the right to enforce such an agreement.

On May 29, 2009, through binding arbitration, Mr. Lyons was awarded approximately \$1.2 million for his claims. Subsequently, on June 25, 2009 the Company filed, in the Circuit Court of Frederick County, Maryland, a Petition to Vacate Arbitration Award issued by the arbitrator. The Motion was denied by the Court on December 30, 2009.

On January 14, 2010, the Court entered Judgment in favor of Mr. Lyons and against the Defendants jointly and severally in the amount of \$1,217,919. The matter is now on appeal in the Maryland Court of Special Appeals.

As of the date of this filing, the Court of Special Appeals has not ruled on the Appeal. However, the Defendants intend to pursue the appeal toward either settlement or reversal. It is management’s opinion that, the court’s decision will be reversed on appeal or the amount of damages will be reduced because the arbitrator used information beyond the evidence to reach his verdict. Management’s position is also that any Judgment against the Corporation is improper because Mr. Whelan and the other Board members present had no authority to make this agreement on behalf of the Company. If the claims are not vacated by the Court, the Board of Directors will pursue collection of the damages from the Directors who participated in the action.

At this time, the Company cannot accurately estimate actual damages to the claimants since the appeal is still pending. As a result of all the uncertainties, the outcome cannot be reasonably determined at this time and the Company is unable to estimate the loss, if any, in accordance with ASC Topic 450 “Contingencies” (formerly SFAS No. 5, “Accounting for Contingencies”).

BioElectronics Corporation (A Development Stage Company)  
Notes to Condensed Financial Statements  
(Unaudited)

**NOTE 15 – RELATED PARTY TRANSACTIONS**

In addition to the related party transactions disclosed in Note 7 and Note 8, BioElectronics signed a distribution agreement on February 9, 2009 with eMarkets Group, LLC (eMarkets) a company owned and controlled by a member of the board of directors and sister of the Company's president. The agreement provides for eMarkets to be the exclusive distributor of the veterinary products of the Company to customers in certain countries outside of the United States for a period of three years. The distribution agreement lists the prices to be paid for the Company's products by eMarkets and provides for the Company to provide training and customer support at its own cost to support the distributor's sales function.

Sales transactions to eMarkets recognized for the three months ended March 31, 2010 include \$1,273 in sales and \$152 in cost of goods sold. For the three months ended March 31, 2009, sales to eMarkets accounted for \$15,750 in sales and \$3,210 in cost of goods sold to eMarkets. Sales include \$0 and \$14,784 from bill and hold revenues transactions for the three months ended March 31, 2010 and 2009, respectively. The balance due from eMarkets was \$24,723 and \$165,297 at March 31, 2010 and December 31, 2009, respectively. Such amounts were presented under "Trade receivables from related parties".

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

*This Quarterly Report on Form 10-Q may contain certain forward-looking statements, including without limitation, statements concerning BioElectronics Corporation ("the Company") operations, economic performance and financial condition. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, and within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. The words "believe," "expect," "anticipate," "will," "could," "would," "should," "may," "plan," "estimate," "intend," "predict," "potential," "continue," and the negatives of these words and other similar expressions generally identify forward-looking statements. These forward-looking statements may include statements addressing our operations and our financial performance. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates. These forward-looking statements are based largely on the Company's current expectations and are subject to a number of risks and uncertainties. Factors we have identified that may materially affect our results are discussed in our Annual Report on Form 10-K, including the documents, for the year ended December 31, 2009, particularly under Item 1A, "Risk Factors". In addition, other important factors to consider in evaluating such forward-looking statements include changes in external market factors, changes in the Company's business or growth strategy or an inability to execute its strategy, including due to changes in its industry or the economy generally. In light of these risks and uncertainties, there can be no assurances that the results referred to in the forward-looking statements will, in fact, occur. We undertake no obligation to revise any forward-looking statements in order to reflect events or circumstances that may arise after the date of this report. Readers are urged to carefully review and consider the various disclosures made in this report, in our Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission that attempt to advise interested parties of the risks and factors that may affect our business.*

**INTRODUCTION**

We are the maker of inexpensive, drug-free, anti-inflammatory medical devices and patches. Our wafer thin patches contain an embedded microchip and battery that deliver pulsed electromagnetic energy, a clinically proven and widely accepted anti-inflammatory and pain relief therapy that heretofore has only been possible to obtain from large, facility-based equipment. We market and sell our products under the brand names ActiPatch®, Allay™, RecoveryRx™ and HealFast™.

During the three months ended March 31, 2010, our focus was on launching direct response television (DRTV) tests in Latin America, preparing other international launches of DRTV campaigns, implementing extensive product improvements, fulfilling large orders, and obtaining additional domestic and international distribution channels. Securing additional U.S. FDA market clearance is central to market entry and product acceptance.

Our customers include physicians, market product distributors, and direct response television distributors. Plastic surgery is the only domestic market segment with current U.S. FDA market clearance. Consequently, until additional clearances are received from the U.S. FDA, domestic sales are restricted primarily to medical providers, and the majority of sales will be located outside the United States. As of March 31, 2010, we have established distribution agreements with distributors that offer our product for sale in over 40 countries internationally, mainly in Europe, Latin America, Middle East and South East Asia. The international market is expected to further expand going forward and to eventually constitute two-thirds of our total sales.

### **MAJOR GOALS, SIGNIFICANT ACTIVITIES AND RESULTS DURING FIRST QUARTER OF 2010**

BioElectronics' operational plan is centered on marketing oriented functions. We believe our product set is very strong, our quality is very high, our ISO-certified production capabilities are extensive, and our Company is structured for accelerated growth. Over the past 24 months, the Company has significantly strengthened its product lines, improved product quality, created new packaging, and redesigned marketing materials and products.

We have several major goals to continue the advancement of its business operations, including: 1) completing additional clinical trials; 2) obtaining additional U.S. FDA and international product market clearances; 3) continuing to build our four primary brands; 4) building domestic distribution, including direct response television commercials and drug/grocery store-based distribution; and 5) expanding our already growing international distribution network.

#### **Additional U.S. Government FDA and International Regulatory Body Filings**

Our product is currently classified as a high risk, Class III device. We have U.S. FDA market clearance for the treatment of edema following blepharoplasty. We have filed two additional 510(k) market clearance applications for "relief of musculoskeletal pain" and "relief of menstrual cycle pain and discomfort" for over-the-counter sales. Even though the U.S. FDA is reluctant to give us over-the-counter clearance for a Class III device, we are currently pursuing both reclassification and approval of the pending applications. We are also preparing an additional U.S. FDA market clearance request for our new chronic pain device and a market clearance request for post-operative pain and edema. As we expand internationally, we are required to and do obtain additional market clearance in each country.

#### **Continue to Build Our Four Primary Markets**

We augmented our marketing team in 2009 with two experienced Brand Managers to help build our brands. In the coming months, we plan to add additional brand management staff to further assist our marketing efforts.

Because BioElectronics has only limited U.S. FDA clearance of its products, mass distribution to direct consumers in the United States is prohibited. We believe U.S. FDA clearance for some of our products is forthcoming, and thus, we are currently in the process of identifying and building a domestic distribution network.

#### **Continued Expansion of Our Already Growing International Distribution Network**

BioElectronics has made steady, significant progress in building an international distribution network. Due to the Company obtaining over-the-counter sales approval for its products in Canada, Europe and many other markets, it has regular interest from international distribution companies to market and distribute the product lines. Our strategy is to partner with distributors that have the experience and financial ability to place our products into the consumer goods retail sales channels. We have seen success in executing this strategy relative to Canada, Western Europe, South-East Asia and the Middle East. Since retail distribution is a core strategy, the Company is regularly in negotiations with existing and future distributors, and anticipates signing additional contracts with qualified distributors in Asia, Europe, and other international locations.

The Company developed Direct Response Television (DRTV) materials produced by leading companies (Schulberg Media Works for English-speaking markets, and RC Productions for Hispanic markets) for both the ActiPatch Back Pain product and the Allay Menstrual Pain Therapy product. Subsequently, the commercials are extremely helpful with establishing partnerships with major DRTV companies to test our products in many countries. The Company contracted with TeleDEPOT in Latin America, where it completed a very successful test in several countries. In Canada, we are partnering with Northern Response, one of the world's largest DRTV companies, to test our products. Northern Response is also looking for further opportunities in six additional international locations that show interest in our products. In Australia and New Zealand, one of our distributors will test the back pain commercial; while in Turkey, another distributor will test Allay, our menstrual pain product.

#### **Other Issues Relative to Plan of Operations**

**Cash Requirements** - BioElectronics is currently in a strong current asset position with its current assets exceeding current liabilities, yielding a current ratio well above one. As is typical for most growth companies, BioElectronics may, in the future, need to raise additional funds to finance its working capital requirements. It is unknown at this time how much, if any, additional funds will be needed to execute our business plan, as it is highly dependent upon our sales growth trajectory over the coming quarters.

**Research and Development** - Our products are substantially developed and ready for sale, and many of our products are currently offered for sale on the international market. We are designing several new products based on our core technologies with developmental costs being financed through normal operating cash flows.

**Expected Purchase or Sale of Plant and Significant Equipment** - BioElectronics does not anticipate any major purchases or sales of plant or significant equipment.

**Expected Changes in the Number of Employees** - We are currently recruiting new talent and expect our hiring will focus on marketing personnel, support, and manufacturing staff. Our hiring plans are dependent upon revenue growth rates over the coming quarters.

## RESULTS OF OPERATIONS

Our principal activity, to sell and market in the U.S. retail market, has not yet commenced due to the lack of U.S. FDA approval for our product. As a result, we consider ourselves a development stage entity in accordance with FASB Accounting Standards Codification Topic 915, "Development Stage Enterprise", and accordingly present, in our financial statements, the results of operations and other disclosures for the company for the period from our inception, April 10, 2000 to March 31, 2010.

### Three Months Ended March 31, 2010 Compared to Three Months Ended March 31, 2009

**Revenue.** Revenue from operations for the three months ended March 31, 2010 and 2009 amounted to approximately \$282,000 and \$295,000, respectively, a decrease of \$13,000 or 4% over the prior year. The following table summarizes the Company's domestic, international and veterinary (related party) revenues earned during the three months ended March 31, 2010 and 2009:

	For the three months ended, March 31,		2009	
	Amounts	Percentage	Amounts	Percentage
<b>International</b>	\$ 252,440	90%	\$ 116,766	40%
<b>Domestic</b>	28,054	10%	162,065	55%
<b>Veterinary</b>	1,273	0%	15,750	5%
	<b><u>\$ 281,767</u></b>	<b><u>100%</u></b>	<b><u>\$ 294,581</u></b>	<b><u>100%</u></b>

International sales increased by approximately \$136,000 or 116% in the three months ended March 31, 2010 from the comparative period in 2009 as a result of new distributorship agreements signed in 2010 and increased sales through agreements signed in prior years. Domestic sales reduced by approximately \$134,000 or 83% in the three months ended March 31, 2010 from the comparative period in 2009 resulting from sales of special cervical devices totaling \$100,000 in 2009.

Veterinary revenues of \$1,273 and \$15,750 were recorded in the three months ended March 31, 2010 and 2009, respectively. The reduction in veterinary revenues is primarily due to eMarkets requesting shipment of the bill and hold transactions from 2009 in lieu of purchasing additional units. eMarkets is our exclusive distributor of veterinary products to customers in certain countries outside of the United States.

At March 31, 2010, the Company has not yet delivered 43,160 units, totaling approximately \$366,000 bill and hold sales recognized for the year ended December 31, 2009. The units will be shipped during 2010 to help meet the distribution 2010 purchase obligation.

**Cost of Goods Sold and Gross Margin.** Costs of goods sold for the three months ended March 31, 2010 and 2009 amounted to approximately \$121,000 and \$76,000, respectively. Gross margin decreased from approximately 74% of sales for the three months ended March 31, 2009 to approximately 57 % for the three months ended March 31, 2010. The decrease was primarily the result of replacing 7,500 defective units totaling approximately \$30,000 in cost of goods sold. Other factors include higher production costs, which arose from an increase in the use of contingent workers to expedite shipment of the new Allay packaging, and higher shipping costs related to international sales. We expect the normal gross margins on our products to be in the range of 66 % to 70 % of sales in the future, depending on product mix and sales prices. This gross margin range is consistent with other medical device and pharmaceutical companies.

**General and Administrative Expense.** For the three months ended March 31, 2010, general and administrative expenses amounted to approximately \$626,000 as compared to \$260,000 in comparative period of 2009, an increase of \$366,000 or 142% over the prior period. The increase in general and administrative expenses in 2010 was primarily driven by an increase in accounting, legal and investor relations expenses to begin reporting to the SEC.

General and administrative expenses of approximately \$626,000 for the three months ended March 31, 2010 included approximately \$72,000 in marketing support expenses, approximately \$201,000 in legal and accounting expense, approximately \$46,000 in investor relation consulting expense, approximately \$7,000 in depreciation and amortization, and approximately \$300,000 in other general and administrative expenses.

General and administrative expenses of approximately \$260,000 for the three months ended March 31, 2009, consisted of approximately \$94,000 in sales support expenses, approximately \$19,000 in legal and accounting expense, approximately \$5,000 in investor relations expense, approximately \$4,000 in depreciation and amortization, and \$139,000 in other general and administrative expenses.

**Interest Expense.** Interest expense increased to approximately \$29,000 for the three months ended March 31, 2010 from approximately \$20,000 in the comparable period in 2009. The increase in interest expense was mainly attributed to the new financing loans with IBEX, LLC ("IBEX"). IBEX, LLC is a limited liability company, whose President is the daughter of the President of the Company.

**Net Loss.** Net losses increased from approximately \$61,000 during the first three months of 2009 to approximately \$495,000 during the comparative period in 2010. Losses were increased primarily due to increase in general and administrative expense and interest expense.

## LIQUIDITY AND CAPITAL RESOURCES

Our sources of funds are primarily cash flows from financing activities. We raise funds for our operations by borrowing on notes, agreements with third parties and related parties, and selling equity in the capital markets. We are still operating as a development stage company, in which we are devoting substantially all of our present efforts to developing our business. For every year and period since our inception, we have generated negative cash flow from operations. At March 31, 2010, our cash and cash equivalents were approximately \$94,000. Since December 31, 2009, our balance of cash and cash equivalents decreased by approximately \$203,000 as a result of our loss from operations in the quarter of \$494,642, offset by changes in our working capital balances and proceeds received from our financing activities, primarily proceeds from the issuance of related party notes payable and assignment of receivables under our factoring agreement with Jarenz LLC ("Jarenz"), a related party. Jarenz is a limited liability company, whose owner is the daughter of the President of the Company.

Since our inception on April 10, 2000, the majority of our financing has been provided by the Company's founders including the CEO, certain board members, and their immediate family and associates. As of March 31, 2010, all of the Company's debt was provided by these related parties. We present the secured borrowing as short-term liabilities and the notes payable as long-term liabilities in our financial statements, as the holders of these notes (who are related parties) have no current intention to pursue repayment of these amounts.

At March 31, 2010, we had positive working capital of approximately \$1,004,000 which is comparable to approximately \$1,026,000 at December 31, 2009.

On January 1, 2005, we entered into an unsecured revolving convertible promissory note agreement ("the Revolver") with IBEX, for a maximum limit of \$2,000,000, with interest at the Prime Rate plus 2% (i.e. 5.25% for the three months ended March 31, 2010), and all accrued interest and principal due on or before January 1, 2015, whether by the payment of cash or by conversion into shares of our common stock. The Revolver is convertible into Common Shares of the Company at various conversion prices based on the VWAP for the 10 trading days preceding the date of conversion. As of March 31, 2010, an amount of approximately \$1,305,000 was drawn from the Revolver.

On August 1, 2009, we entered into a convertible promissory note agreement with IBEX, for \$519,920, with simple interest at 8% per annum. All accrued interest and principal are due on or before August 31, 2011, whether by the payment of cash or by conversion into shares of our common stock. The promissory note is convertible into Common Shares of the Company based on (i) a sum equal to the entire outstanding principal and interest, divided by (ii) the conversion price.

On February 9, 2010, the Company entered into a convertible promissory note agreement with IBEX, for \$135,000, with simple interest at 8% per annum. All accrued interest and principal are due on or before February 2, 2012, whether by the payment of cash or by conversion into shares of the Company's common stock. The promissory note is convertible into Common Shares of the Company based on (i) a sum equal to the entire outstanding principal and interest, divided by (ii) the conversion price.

On March 31, 2010, the Company entered into a convertible promissory note agreement with IBEX, for \$310,000, with simple interest at 8% per annum. All accrued interest and principal are due on or before March 31, 2012, whether by the payment of cash or by conversion into shares of the Company's common stock. The promissory note is convertible equal to the quotient of (i) a sum equal to the entire outstanding principal and interest, divided by (ii) the conversion price.

The Company entered into an Agreement (the "Agreement") on March 5, 2010, with Jarenz pursuant to which Jarenz is providing accounts receivable financing and collection services to the Company. The Agreement provides for the Company to assign certain accounts receivable balances to Jarenz in exchange for a cash advance amount of up to 80% of the face value of the receivables transferred; such amount determined upon discussions between the parties. Following collection of the related receivable, Jarenz pays the balance thereof to BioElectronics minus the initial down payment and a discount fee earned by Jarenz. Jarenz's discount fee is a percentage of the cash advance amount based upon the number of days elapsing between the date of purchase by Jarenz and the date of collection of the related accounts receivable. As at March 31, 2010, 10% of the initial down payment of the assigned receivables was drawn totaling approximately \$65,000. The Company will draw further cash advance amounts upon additional financing needs.

**Net Cash Used In Operating Activities.** Net cash used in operating activities amounted to approximately \$647,000 and \$216,000 in the three months ended March 31, 2010 and March 31, 2009.

Net cash used in operating activities amounted to approximately \$647,000 for the three months ended March 31, 2010 primarily as a result of the net loss incurred for the quarter, offset by changes in the Company's capital balances including an increase in trade and other receivables of approximately \$191,000, increase in accounts payable of approximately \$108,000, and increase in inventory of approximately \$156,000.

Net cash used in operating activities amounted to approximately \$216,000 for the three months ended March 31, 2009 primarily as a result of the net loss incurred for the quarter, offset by changes in the Company's capital balances including an increase in trade and other receivables of approximately \$62,000, decrease in accounts payable of approximately \$39,000, increase in inventory of approximately \$74,000, and decrease in customer deposits of approximately \$79,000.

**Net Cash Used in Investing Activities.** During the three months ended March 31, 2010, we purchased approximately \$45,000 of laboratory equipment to develop new products and to improve quality assurance. We did not make any significant investments in fixed or other long-term assets during the three months ended March 31, 2009.

**Net Cash Provided by Financing Activities.** Net cash provided by financing activities amounted to approximately \$489,000 and \$184,000 in three months ended March 31, 2010 and March 31, 2009, respectively. The increase of approximately \$305,000 was primarily because of the increase in proceeds obtained from related party notes payable of approximately \$348,000.

During the three months ended March 31, 2010, the Company generated approximately \$489,000 in cash from financing activities through the issuance of notes payable to related parties (amounting to \$445,000) and the assignment of receivables to related parties (amounting to \$65,000). The proceeds received from these activities were used to repay notes payable and financing of receivable (amounting to \$21,000) and to fund operations during the year.

During the three months ended March 31, 2009, the Company generated \$184,000 in cash from financing activities mainly through the issuance of related party notes payable (amounting to \$96,600) and the sale of common shares (amounting to \$147,000). The funds received were used to repay certain notes payable (amounting to \$51,000) and to fund operations.

**Going concern.** The Company's financial statements have been prepared on a going concern basis which contemplates the realization of assets and the liquidation of liabilities in the ordinary course of business. We have incurred substantial losses from operations in the three months ended March 31, 2010 and prior years, including a net loss of approximately \$495,000 and \$61,000 for the three months ended March 31, 2010 and March 31, 2009 respectively. The Company also has an accumulated deficit as of March 31, 2010 of \$11,159,132.

We are currently looking for additional financing to provide funds for operations and to complete our developmental activities. However, we can provide no assurance that we will be able to obtain financing on reasonable terms and at sufficient levels to enable us to complete developmental activities, receive U.S. FDA approval and develop sufficient sales revenue and achieve profitable operations. Until sufficient financing has been received to complete our developmental activities, there exists substantial doubt as to our ability to continue as a going concern.

**Item 3. Quantitative and Qualitative Disclosures About Market Risk.**

We have minimal market risk inherent in our financial position. We do not have any derivative financial instruments and do not hold any derivative financial instruments for trading purposes. Our market risk primarily represents the potential loss arising from adverse changes in market interest rates. Our results from operations could be impacted by decreases in interest rates on our cash and cash equivalents. Additionally, we may be exposed to market risk from changes in interest rates related to any debt that may be outstanding under our related party notes payable. We do not expect our cash flows to be affected to any significant degree by a sudden change in market interest rates.

We operate our business within the United States and sell to the United States and certain international locations such as Italy, Canada, Saudi Arabia, Scandinavia, Netherlands and Singapore. We execute all of our transactions in U.S. dollars and therefore do not have any foreign currency exchange risk.

**Item 4T. Controls and Procedures.**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act 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 our management, including our President, Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. In designing and evaluating these 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.

***Evaluation of disclosure controls and procedures***

We evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Disclosure controls and procedures are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act, such as this Quarterly Report on Form 10-Q are recorded, processed, summarized and reported within the time periods specified by the SEC. Disclosure controls are also designed to ensure that such information is accumulated and communicated to our President, Chief Executive Officer and Chief Financial Officer, and other management, as appropriate, to allow timely decisions regarding required disclosure.

Based on the evaluation, our President, Chief Executive Officer and Chief Financial Officer after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), have concluded that, subject to the inherent limitations noted in this Part I, Item 4T, as of March 31, 2010, our disclosure controls and procedures were not effective due to the existence of several material weaknesses in our internal control over financial reporting, as discussed below.

***Material Weaknesses Identified***

In connection with the preparation of our financial statements for the year ended December 31, 2009, certain significant deficiencies in internal control became evident to management that, in the aggregate, represent material weaknesses, including:

(i) Lack of a sufficient number of independent directors for our board and audit committee. We currently only have one independent director on our board, which is comprised of three directors, and on our audit committee, which is comprised of one director. Although we are considered a controlled company, whereby a group holds more than 50% of the voting power and as such are not required to have a majority of our board of directors be independent, it is our intention to have a majority of independent directors in due course.

(ii) Lack of a financial expert on our audit committee. We currently do not have an audit committee financial expert, as defined by SEC regulations, on our audit committee.

(iii) Insufficient segregation of duties in our finance and accounting functions due to limited personnel. During the three months ended March 31, 2010, we had one person on staff that performed nearly all aspects of our financial reporting process, including, but not limited to, access to the underlying accounting records and systems, the ability to post and record journal entries and responsibility for the preparation of the financial statements. This creates certain incompatible duties and a lack of review over the financial reporting process that would likely result in a failure to detect errors in spreadsheets, calculations, or assumptions used to compile the financial statements and related disclosures as filed with the SEC. These control deficiencies could result in a material misstatement to our interim or annual consolidated financial statements that would not be prevented or detected.

As part of the communications by Berenfeld, Spritzer Shechter & Sheer LLP, (“Berenfeld, Spritzer”), with our Audit Committee with respect to Berenfeld, Spritzer’s audit procedures for fiscal 2009, Berenfeld, Spritzer informed the audit committee that these deficiencies constituted material weaknesses, as defined by Auditing Standard No. 5, “An Audit of Internal Control Over Financial Reporting that is Integrated with an Audit of Financial Statements and Related Independence Rule and Conforming Amendments,” established by the Public Company Accounting Oversight Board (“PCAOB”).

***Plan for Remediation of Material Weaknesses***

We intend to take appropriate and reasonable steps to make the necessary improvements to remediate these deficiencies. We intend to consider the results of our remediation efforts and related testing as part of our year-end 2010 assessment of the effectiveness of our internal control over financial reporting.

We have implemented certain remediation measures and are in the process of designing and implementing additional remediation measures for the material weaknesses described in this Quarterly Report on Form 10-Q. Such remediation activities include the following:

- At an appropriate time, we will recruit one or more additional independent board members to join our board of directors. Such recruitment will include at least one person who qualifies as an audit committee financial expert to join as an independent board member and as an audit committee member.
- We will hire or engage additional qualified and experienced accounting personnel as necessary to review our quarter-end closing processes as well as provide additional oversight and supervision within the accounting department.

In addition to the foregoing remediation efforts, we will continue to update the documentation of our internal control processes, including formal risk assessment of our financial reporting processes.

***Changes in Internal Controls over Financial Reporting***

There were no significant changes in internal control over financial reporting during the first quarter of 2010 that materially affected, or are reasonably likely to materially affect, our internal control over financing reporting.

**PART II - OTHER INFORMATION**

**Item 1. Legal Proceedings.**

The Company and Andrew Whelan, President & CEO, were defendants in a lawsuit brought by a plaintiff who is seeking damages arising from a breach by the Company of certain alleged oral contractual obligations. The plaintiff claimed that, pursuant to these alleged obligations, he would have been entitled to receive common stock from the Company as compensation for rendering certain services to the Company. The matter was removed from Maryland state court to arbitration provided for in the contract at issue. The plaintiff prevailed in arbitration, and a judgment was entered against BioElectronics Corporation, PAW, LLC and Andrew Whelan in the amount of \$1,217,919.10. The Company believes the plaintiff's claims to be without merit and the arbitrator's decision to have been possible only by a manifest disregard of the law. As such, the Company and Mr. Whelan filed a Petition to Vacate Arbitration Award with the Maryland Court of Special Appeals. Though no rulings have yet been issued, a mediation hearing on the petition is scheduled for June 17, 2010. The Company intends to continue defend the matter and vigorously pursue any and all available remedies.

The Board of Directors has retained legal counsel to pursue, if necessary, the collection of any damages to the Company.

**Item 1A. Risk Factors.** As a smaller reporting company, Registrant is not required to provide the information required by this item.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

On March 18, 2010, the Company issued and tendered 1,000,000 common shares to a consultant in respect of services provided in the year ended December 31, 2009. The shares were recorded at \$0.00225 per share (or \$2,250 in aggregate), and the related expense was recorded in the prior year.

**Item 3. Defaults Upon Senior Securities.**

We have minimal market risk inherent in our financial position. We do not have any derivative financial instruments and do not hold any derivative financial instruments for trading purposes. Our market risk primarily represents the potential loss arising from adverse changes in market interest rates. Our results from operations could be impacted by decreases in interest rates on our cash and cash equivalents. Additionally, we may be exposed to market risk from changes in interest rates related to any debt that may be outstanding under our related party notes payable. We do not expect our cash flows to be affected to any significant degree by a sudden change in market interest rates.

**Item 4. (Removed and Reserved).** Not applicable.

**Item 5. Other Information.** Not applicable

**Item 6. Exhibits.**

Exhibit 31.1. Certification of Principal Executive Officer and Principal Financial Officer

Exhibit 32.1. Certification of Chief Executive Officer and Chief Financial Officer.



**EXHIBIT 31.1**

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER  
AND PRINCIPAL FINANCIAL OFFICER  
Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002**

I, Andrew J. Whelan, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BioElectronics Corporation for the period ending March 31, 2010;
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 BioElectronics as of, and for the periods presented in this quarterly report;
4. I am the sole officer and responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls 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 that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. 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 function):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal controls 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 controls.

Date: May 12, 2010

s/ Andrew J. Whelan  
Andrew J. Whelan  
President, CEO and CFO  
(Principal Executive Officer and Principal Financial Officer)

**EXHIBIT 32.1**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER  
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

The following statement is provided by the undersigned to accompany the Form 10-Q for the quarter ended March 31, 2010 of BioElectronics Corporation pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350) and shall not be deemed filed pursuant to any provision of the Exchange Act of 1934 or any other securities law.

Each of the undersigned certifies that the foregoing Report on Form 10-Q fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m) and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of BioElectronics Corporation.

/s/ Andrew J. Whelan

Andrew J. Whelan  
President and Chief Executive Officer  
BioElectronics Corporation

/s/ Andrew J. Whelan

Andrew J. Whelan  
Chief Financial Officer  
BioElectronics Corporation

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**This fax cover sheet is NOT part of the official filing and is meant as a courtesy only. Please disregard this page if you plan to submit changes via email. Email is the preferred method for submitting changes.**

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# Fax Cover Sheet

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Fax:	646-349-9655	Phone:	
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Project:	v184536	Form Type:	10-Q
Client:	BioElectronics Corporation		

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