

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM S-8

**REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933**

BIOSIG TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

26-4333375

(I.R.S. Employer Identification No.)

12424 Wilshire Boulevard, Suite 745

Los Angeles, California 90025

(310) 820-8100

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

BioSig Technologies, Inc. 2012 Equity Incentive Plan

(Full title of the plans)

Gregory D. Cash

President and Chief Executive Officer

12424 Wilshire Boulevard, Suite 745

Los Angeles, California 90025

(310) 820-8100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

Rick A. Werner, Esq.

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New York, New York 10112

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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 Accelerated filer Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, \$0.001 par value per share	834,642(2)	\$ 2.00(3)	\$ 1,669,284	\$ 193.97
Common Stock, \$0.001 par value per share	1,692,050(2)	\$ 2.09(3)	\$ 3,536,385	\$ 410.93
Common Stock, \$0.001 par value per share	1,265,769(2)	\$ 2.21(3)	\$ 2,797,349	\$ 325.05
Common Stock, \$0.001 par value per share	2,412,729(2)	\$ 2.50(3)	\$ 6,031,823	\$ 700.90
Common Stock, \$0.001 par value per share	300,000(2)	\$ 3.99(3)	\$ 1,197,000	\$ 139.09
Common Stock, \$0.001 par value per share	1,420,000(4)	\$ 4.03(5)	\$ 5,722,600	\$ 664.97
Common Stock, \$0.001 par value per share	880,933(6)	\$ 4.03(5)	\$ 3,550,160	\$ 412.53
Total	<u>8,806,123</u>		<u>\$ 24,504,601</u>	<u>\$ 2,847.44</u>

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, we are also registering an indeterminable number of shares of common stock that may be issued in connection with stock splits, stock dividends, recapitalizations or similar transactions.
 - (2) Represents shares of common stock issuable pursuant to stock option awards outstanding under the 2012 Equity Incentive Plan (the "2012 Plan").
 - (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act of 1933, as amended, and based upon the weighted average price at which such options may be exercised.
 - (4) Represents shares of restricted stock issued under the 2012 Plan.
 - (5) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and (h) under the Securities Act of 1933, as amended. The fee is calculated on the basis of the average of the high and low sale prices for the registrant's common stock as reported on the OTC Markets Group Inc.'s OTCQB tier on April 14, 2015.
 - (6) Represents shares of common stock reserved for issuance pursuant to the 2012 Plan.
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EXPLANATORY NOTE

This registration statement registers 6,505,190 shares of common stock, par value \$0.001 per share, of BioSig Technologies, Inc. (“we”, “us”, “our”, the “Company” or “Registrant”) underlying options previously granted under the BioSig Technologies, Inc. 2012 Equity Incentive Plan (the “2012 Plan”), 1,420,000 shares of restricted stock previously granted under the 2012 Plan, and 880,933 shares of common stock reserved for issuance under the 2012 Plan.

This Registration Statement also includes a prospectus (which we refer to as the reoffer prospectus) prepared in accordance with General Instruction C of Form S-8 and in accordance with the requirements of Part I of Form S-3. The reoffer prospectus may be used for reofferings and resales of certain of the shares of our common stock listed above that may be deemed to be “control securities” and/or “restricted securities” under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder. These are shares that were or may be acquired by our officers, directors and affiliates, or that were acquired by our employees or consultants, under an employee benefit plan. Such officers, directors, affiliates, employees and consultants are the selling stockholders identified in the reoffer prospectus. The amount of shares to be offered or resold by means of this reoffer prospectus by each selling stockholder, and any other person with whom he or she is acting in concert for the purpose of selling our securities, may not exceed, during any three month period, the amount specified in Rule 144(e) of the Securities Act of 1933, as amended.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The document(s) containing the information specified in Part I will be sent or given to employees as specified by Rule 428(b)(1) of the Securities Act of 1933, as amended. Such documents are not being filed with the Securities and Exchange Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act of 1933, as amended.

REOFFER PROSEPECTUS



BioSig Technologies, Inc.

7,925,190 Shares of Common Stock

This reoffer prospectus relates to shares of common stock of BioSig Technologies, Inc. that may be reoffered or resold from time to time by the stockholders identified in this reoffer prospectus and that have been acquired or that may be acquired under our 2012 Equity Incentive Plan (the "2012 Plan"). This prospectus covers 1,420,000 shares of restricted stock that are owned by the selling stockholders and up to 6,505,190 shares of common stock issuable upon the exercise of currently outstanding options granted under the 2012 Plan.

The selling stockholders may sell shares of common stock from time to time in the principal market on which our common stock is traded at the prevailing market price or in privately negotiated transactions. See "Plan of Distribution" which begins on page 9. The amount of shares to be offered or resold by means of this reoffer prospectus by each selling stockholder, and any other person with whom he or she is acting in concert for the purpose of selling our securities, may not exceed, during any three month period, the amount specified in Rule 144(e) of the Securities Act of 1933, as amended.

We will not receive any of the proceeds from the sale of common stock by the selling stockholders. However, we will generate proceeds in the event of an exercise of the options by the selling stockholders. We intend to use those proceeds, if any, for general corporate purposes. We will pay the expenses of registering these shares.

Our common stock is quoted on the OTCQB tier of the OTC Markets Group Inc. under the symbol "BSGM." On April 15, 2015, the last reported sale price of our common stock as reported on the OTCQB was \$3.70 per share.

We may amend or supplement this reoffer prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus, the information incorporated by reference herein and any amendments or supplements carefully before you make your investment decision.

Investing in our common stock is highly speculative and involves a high degree of risk. You should carefully consider the risks and uncertainties in the section entitled "Risk Factors" beginning on page 4 of this reoffer prospectus before making a decision to purchase our stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this reoffer prospectus is April 17, 2015.

TABLE OF CONTENTS

	<u>Page</u>
<u>ABOUT THIS PROSPECTUS</u>	2
<u>PROSPECTUS SUMMARY</u>	3
<u>RISK FACTORS</u>	4
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	4
<u>USE OF PROCEEDS</u>	5
<u>SELLING STOCKHOLDERS</u>	5
<u>PLAN OF DISTRIBUTION</u>	9
<u>DESCRIPTION OF SECURITIES</u>	10
<u>LEGAL MATTERS</u>	13
<u>EXPERTS</u>	13
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	13
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	14

ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus or incorporated by reference in this prospectus and in any applicable prospectus supplement. Neither we nor the selling stockholders have authorized anyone to provide you with different information. We and the selling stockholders take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The information contained in this prospectus, any applicable prospectus supplement and the documents incorporated by reference herein or therein are accurate only as of the date such information is presented. Our business, financial condition, results of operations and prospects may have changed since that date. You should also read this prospectus together with the additional information described under the headings “Incorporation of Certain Information by Reference” and “Where You Can Find More Information.” This prospectus may be supplemented from time to time to add, update or change information in this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in such prospectus supplement modifies or supersedes such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus.

The selling stockholders are offering the common stock only in jurisdictions where such issuances are permitted. The distribution of this prospectus and the issuance of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the issuance of the common stock and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, the common stock offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement, including the exhibits, can be read on the Securities and Exchange Commission’s website or at the Securities and Exchange Commission’s offices mentioned under the heading “Where You Can Find More Information.”

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider before investing in our common stock. You should carefully read the prospectus, the information incorporated by reference and the registration statement of which this prospectus is a part in their entirety before investing in our common stock, including the information discussed under "Risk Factors" in this prospectus and the documents incorporated by reference and our financial statements and notes thereto that are incorporated by reference in this prospectus. As used in this prospectus, unless the context otherwise indicates, the terms "we," "our," "us," or "the Company" refer to BioSig Technologies, Inc., and, where appropriate, its consolidated subsidiaries.

Overview

We are a development stage medical device company that is developing a proprietary technology platform to minimize noise and artifacts from cardiac recordings during electrophysiology studies and ablation. We are developing the PURE EP System, a surface electrocardiogram and intracardiac multichannel recording and analysis system that acquires, processes and displays electrocardiogram and electrograms required during electrophysiology studies and ablation procedures. The PURE (Precise Uninterrupted Real-time evaluation of Electrograms) EP System is designed to assist electrophysiologists in making clinical decisions in real-time by providing information that, we believe, is not easily obtained, if at all, from any other equipment presently used in electrophysiology labs. PURE EP System's ability to acquire high fidelity cardiac signals will potentially increase these signals' diagnostic value, and therefore offer improved accuracy and efficiency of the EP studies and related procedures.

We are developing signal processing tools within the PURE EP System, which we call confidence indexes. We believe that these will assist electrophysiologists in further differentiating true signals from noise, and will provide guidance in identifying ablation targets.

Because we are an early development stage company, with our initial product under development, we currently do not have any customers. We anticipate that our initial customers will be hospitals and other health care facilities that operate electrophysiology labs.

Corporate History

We were formed as BioSig Technologies, Inc., a Nevada corporation, in February 2009 and in April 2011 we merged with our wholly-owned subsidiary, BioSig Technologies Inc., a Delaware corporation, with the Delaware corporation continuing as the surviving entity. We have not generated any revenue to date and consequently our operations are subject to all risks inherent in the establishment of a new business enterprise.

On October 29, 2014, our common stock commenced trading on the OTCQB tier of the OTC Markets Group Inc. under the symbol "BSGM." Prior to October 29, 2014, there was no established public market for our common stock.

Our principal executive offices are located at 12424 Wilshire Boulevard, Suite 745, Los Angeles, California 90025. Our telephone number is (310) 820-8100. Our website address is www.biosigtech.com. Information accessed through our website is not incorporated into this prospectus and is not a part of this prospectus.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties and all other information contained or incorporated by reference in this prospectus, including the risks and uncertainties discussed under “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, which is incorporated herein by reference, as updated or superseded by the risks and uncertainties described under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus or any prospectus supplement. All of these “Risk Factors” are incorporated by reference herein in their entirety. These risks and uncertainties are not the only ones facing us. Additional risks of which we are not presently aware or that we currently believe are immaterial may also harm our business and results of operations. The trading price of our common stock could decline due to the occurrence of any of these risks, and investors could lose all or part of their investment. In assessing these risks, investors should also refer to the information contained or incorporated by reference in our other filings with the Securities and Exchange Commission.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference contain “forward-looking statements,” which include information relating to future events, future financial performance, strategies, expectations, competitive environment and regulation. Words such as “may,” “should,” “could,” “would,” “predicts,” “potential,” “continue,” “expects,” “anticipates,” “future,” “intends,” “plans,” “believes,” “estimates,” and similar expressions, as well as statements in future tense, identify forward-looking statements. Forward-looking statements should not be read as a guarantee of future performance or results and will probably not be accurate indications of when such performance or results will be achieved. Forward-looking statements are based on information we have when those statements are made or our management’s good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- Our ability to manufacture our product candidates on a commercial scale on our own, or in collaboration with third parties.
- Difficulties in obtaining financing on commercially reasonable terms.
- Changes in the size and nature of our competition.
- The potential loss of one or more key executives or scientists.
- Changes in general, national or regional economic conditions.
- Our ability to complete preclinical and clinical trials as anticipated.
- Our ability to obtain necessary regulatory approvals from the U.S. Food and Drug Administration or other regulatory authorities.
- Inability to carry our research, development and commercialization plans.
- Our ability to adequately protect our intellectual property.
- Potential disputes over ownership of intellectual property.
- Future sales of large blocks of our common stock may adversely impact our stock price.
- The liquidity and trading volume of our common stock.

You should review carefully the section entitled “Risk Factors” beginning on page 4 of this prospectus for a discussion of these and other risks that relate to our business and investing in our common stock. The forward-looking statements contained or incorporated by reference in this prospectus are expressly qualified in their entirety by this cautionary statement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

We will not receive any proceeds from the sale of common stock by the selling stockholders.

Certain of the shares covered by this prospectus are issuable upon exercise of options to purchase our common stock. As such, if a selling stockholder exercises all or any portion of its options, we will receive the aggregate exercise price paid by such selling stockholder in connection with any such option exercise. We intend to use those proceeds, if any, for general corporate purposes.

SELLING STOCKHOLDERS

This reoffer prospectus relates to the reoffer and resale of shares issued or that may be issued to the selling stockholders listed below, or future selling stockholders, under the 2012 Plan. Each of the transactions by which the selling stockholders acquired the securities covered by this prospectus was exempt under the registration provisions of the Securities Act of 1933, as amended.

Executive officers, directors, employees and consultants, their family members, trusts for their benefit, or entities that they own, that acquire common stock under the 2012 Plan may be added to the selling stockholder list below by a prospectus supplement filed with the Securities and Exchange Commission. The number of shares to be sold by any selling stockholder under this prospectus also may be increased or decreased by a prospectus supplement. Notwithstanding the foregoing, the amount of shares to be reoffered or resold by means of this prospectus by each selling stockholder, and any other person with whom such selling stockholder is acting in concert for the purpose of selling our securities, may not exceed, during any three month period, the amount specified in Rule 144(e) of the Securities Act of 1933, as amended. Although a person's name is included in the table below, neither that person nor we are making an admission that the named person is our "affiliate."

The following table sets forth, as of April 17, 2015, the number of shares beneficially owned by each current selling stockholder. The number of shares in the column "Number of Shares Beneficially Owned Prior to the Offering" represents the total number of shares that a selling stockholder currently owns or has the right to acquire within sixty (60) days of April 17, 2015. The number of shares in the column "Shares Which May be Offered" represents all of the shares that a selling stockholder may offer under this reoffer prospectus, and includes shares issuable upon the exercise of options that have not yet vested and are not included in the column "Number of Shares Beneficially Owned Prior to the Offering." The table and footnotes assume that the selling stockholders will sell all of the shares listed in the column "Shares Which May be Offered." However, because the selling stockholders may sell all or some of their shares under this reoffer prospectus from time to time, or in another permitted manner, we cannot assure you as to the actual number of shares that will be sold by the selling stockholders or that will be held by the selling stockholders after completion of any sales. We do not know how long the selling stockholders will hold the shares before selling them. Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended. The selling stockholders have not had a material relationship with us within the past three years other than as set forth in the column "Position" in the table below or as a result of their acquisition of our shares or other securities.

Selling Stockholder	Position	Number of Shares Beneficially Owned Prior to the Offering (1)	Shares Which May be Offered (2)	Shares Beneficially Owned After Offering	Percentage of Common Stock Beneficially Owned After Offering (3)
Kenneth L. Londoner (4)	Executive Chairman and Director	4,605,314(5)	675,000(6)	3,930,314	28.36 %
Gregory D Cash (7)	Chief Executive Officer	205,824(8)	1,290,769(9)	-	*
Asher Holzer (10)	Director	322,000(11)	505,000(12)	60,000	*
Jeff O'Donnell (13)	Director	208,300(14)	320,800(15)	87,500	*
John Steinhouse (16)	Director	461,133(17)	200,000(18)	261,133	1.92%
Kalyanam Shivkumar (19)	Former Director	225,000(20)	275,000(21)	-	*
Patrick J Gallagher (22)	Director	25,000(23)	175,000(24)	-	*
Roy T. Tanaka (25)	Director	569,375(26)	868,927(27)	-	*
Seth H. Z. Fischer (28)	Director	450,944(29)	525,944(30)	-	*
Branislav Vlaisnjic (31)	Employee	193,750(32)	150,000(33)	43,750	*
Budimir S Drakulic (34)	Consultant	500,000(35)	500,000(35)	-	*
Dr Jacob Dagan(36)	Consultant	70,000(37)	70,000(37)	-	*
Irena Drakulic(38)	Employee	10,000(39)	10,000(39)	-	*
Ivana Jovicic (40)	Employee	125,000(41)	125,000(41)	-	*
Leslie Berger (42)	Consultant	12,500(43)	12,500(43)	-	*
Lora Mikolaitis (44)	Employee	3,611,224 (45)	175,000 (46)	3,436,224	25.34%
Ron Coelyn (47)	Consultant	37,500(48)	50,000(49)	-	*
Dr. Rony Shimony (50)	Consultant	283,750(51)	283,750(51)	-	*
Sew-Wah Tay(52)	Consultant	3,333(53)	15,000(53)	-	*
Sina Fakhar (54)	Employee	287,500(55)	200,000(56)	87,500(63)	*
Steve Chaussy(57)	Chief Financial Officer	293,362(58)	260,000(59)	33,362	*
Thomas G Foxall (60)	Employee	287,500(61)	200,000(62)	87,500	*
Dr. Vivek Reddy (63)	Consultant	30,000(64)	30,000(64)	-	*
Stuart Rosenberg (65)	Consultant	12,500(66)	12,500(66)	-	*
Suzanne Ratzloff (67)	Consultant	60,000(68)	60,000(68)	-	*
Jerome B. Zeldis (69)	Director	414,148(70)	300,000(71)	114,148	*
Mark Mahafee(72)	Consultant	15,000(73)	15,000(73)	-	*
Doug Cress (74)	Consultant	20,000(75)	20,000(75)	-	*
Brett Verona (76)	Consultant	18,750(77)	37,500(78)	-	*
William Gerhauser (79)	Consultant	18,750(80)	37,500(81)	-	*
Brian S. John (82)	Consultant	33,333(83)	33,333(83)	-	*
Richard Miller (84)	Consultant	33,333(85)	33,333(85)	-	*
E. Kouyoumdjian(86)	Consultant	33,334(87)	33,334(87)	-	*
Barry Kaplan (88)	Consultant	37,500(89)	37,500(89)	-	*
Andrew Kaplan (90)	Consultant	37,500(91)	37,500(91)	-	*
James Dryer (92)	Consultant	12,500(93)	12,500(93)	-	*
Mimi Galbo (94)	Consultant	12,500(95)	12,500(95)	-	*
David Baker (96)	Consultant	50,000(97)	50,000(97)	-	*
Nations Advisory (98)	Consultant	-(99)	75,000(100)	-	*
Robert Ross (101)	Consultant	-(102)	50,625(103)	-	*
Glenn Farinacci (104)	Consultant	-(105)	16,875(106)	-	*
Jeffrey Ramson (107)	Consultant	50,000(108)	50,000(108)	-	*
Henry Zemla III (109)	Consultant	15,000(110)	15,000(110)	-	*
Frank Benedetto(111)	Consultant	67,500(112)	67,500(112)	-	*

* Less than 1%.

- (1) Shares of common stock beneficially owned and the respective percentages of beneficial ownership of common stock assumes the exercise of all options, warrants and other securities convertible into common stock beneficially owned by such person currently exercisable or exercisable within 60 days of April 17, 2015. Shares issuable pursuant to the exercise of stock options and warrants exercisable within 60 days are deemed outstanding and held by the holder of such options or warrants for computing the percentage of outstanding common stock beneficially owned by such person, but are not deemed outstanding for computing the percentage of outstanding common stock beneficially owned by any other person.
- (2) Assumes the sale of all shares of common stock registered hereunder, which amount is comprised of shares issuable upon the exercise of outstanding stock options and/or shares of restricted stock awarded under the 2012 Plan. Does not constitute a commitment to sell any or all of the stated number of shares of common stock. The number of shares offered shall be determined from time to time by each selling stockholder at their sole discretion.
- (3) Percentage based on 13,561,460 shares of common stock outstanding as of April 17, 2015.
- (4) Mr. Londoner is co-founder and has served as Executive Chairman since 2009.
- (5) Comprised of (i) 299,045 shares of common stock directly held by Mr. Londoner, (ii) 3,334,974 shares of common stock held by Endicott Management Partners, LLC, an entity for which Mr. Londoner is deemed the beneficial owner, (iii) 296,295 shares of common stock issuable upon the exercise of warrants, (iv) 425,000 shares of restricted stock, and (v) 250,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (6) Comprised of (i) 425,000 shares of restricted stock, and (ii) 250,000 shares of common stock issuable upon exercise of options.
- (7) Mr. Cash has served as our President and Chief Executive Officer since July 2014.
- (8) Comprised of (i) 25,000 shares of restricted stock and (ii) 180,824 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (9) Comprised of (i) 25,000 shares of restricted stock, and (ii) 1,265,769 shares of common stock issuable upon exercise of options.
- (10) Dr. Holzer has served as our director since September 2012.
- (11) Comprised of (i) 60,000 shares of common stock, (ii) 25,000 shares of restricted stock, (iii) 237,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (12) Comprised of (i) 25,000 shares of restricted stock, (ii) 480,000 shares of common stock issuable upon exercise of options.
- (13) Mr. O'Donnell has served as our director since February 2015; he had previously served as our director from October 2011 until February 2014.
- (14) Includes (i) 87,500 shares of common stock, (ii) 25,000 shares of restricted stock, and (iii) 95,800 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (15) Comprised of (i) 25,000 shares of restricted stock, (ii) 295,800 shares of common stock issuable upon exercise of options.
- (16) Mr. Steinhouse has served as our director since February 2011.
- (17) Comprised of (i) 215,665 shares of common stock, (ii) 45,468 shares of common stock issuable upon the exercise of warrants, (iii) 25,000 shares of restricted stock, and (v) 175,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (18) Comprised of (i) 25,000 shares of restricted stock, and (ii) 175,000 shares of common stock issuable upon exercise of options.
- (19) Dr. Shivkumar served as our director from September 2012 until October 2014.
- (20) Comprised of shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (21) Comprised of shares of common stock issuable upon exercise of options.
- (22) Mr. Gallagher has served as our director since September 2014.
- (23) Comprised of shares of restricted stock.
- (24) Comprised of (i) 25,000 shares of restricted stock, and (ii) 150,000 shares of common stock issuable upon exercise of options.
- (25) Mr. Tanaka has served as our director since July 2012.
- (26) Comprised of (i) 25,000 shares of restricted stock, and (ii) 544,375 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (27) Comprised of (i) 25,000 shares of restricted stock, and (ii) 843,927 shares of common stock issuable upon exercise of options.
- (28) Mr. Fischer has served as our director since May 2013.
- (29) Comprised of (i) 25,000 shares of restricted stock, and (ii) 425,944 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (30) Comprised of (i) 25,000 shares of restricted stock, and (ii) 500,944 shares of common stock issuable upon exercise of options.
- (31) Mr. Vlajinic has served as our employee since 2010.
- (32) Comprised of (i) 43,750 shares of common stock, and (ii) 150,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (33) Comprised of shares of common stock issuable upon exercise of options.
- (34) Dr. Drakulic has served in an employee or consultant role since 2009.
- (35) Comprised of shares of common stock issuable upon exercise of options.
- (36) Dr. Dagan has served as a consultant since 2013.
- (37) Comprised of shares of common stock issuable upon exercise of options.
- (38) Ms. Drakulic has served as our employee since 2012.
- (39) Comprised of shares of common stock issuable upon exercise of options.
- (40) Ms. Jovicic has served as an employee since 2011.
- (41) Comprised of shares of common stock issuable upon exercise of options.
- (42) Ms. Berger has served as a consultant since 2012.
- (43) Comprised of shares of common stock issuable upon exercise of options.
- (44) Ms. Mikolaitis is a co-founder and employee since 2009.
- (45) Comprised of (i) 43,750 shares of common stock directly held by Ms. Mikolaitis, (ii) 3,392,474 shares of common stock held by Miko Consulting Group, Inc., an entity for which Ms. Mikolaitis is deemed the beneficial owner, (iii) 175,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (46) Comprised of shares of common stock issuable upon exercise of options.

- (47) Mr. Coelyn has served as our consultant since 2014.
- (48) Comprised of shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (49) Comprised of shares of common stock issuable upon exercise of options.
- (50) Dr. Shimony has served as our consultant since 2013.
- (51) Comprised of shares of common stock issuable upon exercise of options.
- (52) Ms. Tay has served as our consultant since 2014.
- (53) Comprised of shares of common stock issuable upon exercise of options.
- (54) Mr. Fakhar has served as our employee since 2010.
- (55) Comprised of (i) 87,500 shares of common stock, (ii) 200,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (56) Comprised of shares of common stock issuable upon exercise of options.
- (57) Mr. Chaussy has served as our chief financial officer since 2010.
- (58) Comprised of (i) 33,362 shares of common stock, (ii) 200,000 shares of restricted stock, and (iii) 60,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (59) Comprised of (i) 200,000 shares of restricted stock, and (ii) 60,000 shares of common stock issuable upon exercise of options.
- (60) Mr. Foxall has served as our employee since 2010.
- (61) Comprised of (i) 87,500 shares of common stock, (ii) 200,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (62) Comprised of shares of common stock issuable upon exercise of options.
- (63) Dr. Reddy has served as our consultant since April 2013.
- (64) Comprised of shares of common stock issuable upon exercise of options.
- (65) Mr. Rosenberg has served as our consultant since September 2012.
- (66) Comprised of shares of common stock issuable upon exercise of options.
- (67) Ms. Ratzloff has served as our consultant since May 2011.
- (68) Comprised of shares of common stock issuable upon exercise of options.
- (69) Dr. Zeldis has been a shareholder since January 2013 and has served as our director since April 2015.
- (70) Comprised of (i) 12,245 shares of common stock, (ii) 33,334 shares of common stock issuable upon the conversion of Series C preferred stock (ii) 68,569 shares of common stock issuable upon the exercise of warrants, (iv) 300,000 shares of common stock issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 17, 2015.
- (71) Comprised of shares of common stock issuable upon exercise of options.
- (72) Mr. Mahafee has served as our consultant since June 2014.
- (73) Comprised of shares of common stock issuable upon exercise of options.
- (74) Mr. Cress has served as our consultant since 2013.
- (75) Comprised of shares of restricted stock.
- (76) Mr. Verona has served as our consultant since November 2014.
- (77) Comprised of shares of restricted stock that are currently issuable or issuable within 60 days of April 17, 2015.
- (78) Comprised of shares of restricted stock.
- (79) Mr. Gerhauser has served as our consultant since November 2014.
- (80) Comprised of shares of restricted stock that are currently issuable or issuable within 60 days of April 17, 2015.
- (81) Comprised of shares of restricted stock.
- (82) Mr. John has served as our consultant since December 2014.
- (83) Comprised of shares of restricted stock.
- (84) Mr. Miller has served as our consultant since December 2014.
- (85) Comprised of shares of restricted stock.
- (86) Mr. Kouyoumdjian has served as our consultant since December 2014.
- (87) Comprised of shares of restricted stock.
- (88) Mr. Kaplan has served as our consultant since December 2014.
- (89) Comprised of shares of restricted stock.
- (90) Mr. Kaplan has served as our consultant since December 2014.
- (91) Comprised of shares of restricted stock.
- (92) Mr. Dryer has served as our consultant since November 2014.
- (93) Comprised of shares of restricted stock.
- (94) Mr. Galbo has served as our consultant since November 2014.
- (95) Comprised of shares of restricted stock.
- (96) Mr. Baker has served as our consultant since November 2014.
- (97) Comprised of shares of restricted stock.
- (98) Mr. Long of Nations Advisory has served as our consultant since October 2014.
- (99) Comprised of shares of restricted stock that are currently issuable or issuable within 60 days of April 17, 2015.
- (100) Comprised of shares of restricted stock.
- (101) Mr. Ross has served as our consultant since January 2015.
- (102) Comprised of shares of restricted stock that are currently issuable or issuable within 60 days of April 17, 2015.
- (103) Comprised of shares of restricted stock.
- (104) Mr. Farinacci has served as our consultant since January 2015.
- (105) Comprised of shares of restricted stock that are currently issuable or issuable within 60 days of April 17, 2015.
- (106) Comprised of shares of restricted stock.
- (107) Mr. Ramson has served as our consultant since January 2015.
- (108) Comprised of shares of restricted stock.
- (109) Mr. Zemla has served as our consultant since January 2015.
- (110) Comprised of shares of restricted stock.
- (111) Mr. Benedetto has served as our consultant since October 2014.

(112) Comprised of shares of restricted stock.

PLAN OF DISTRIBUTION

The selling stockholders may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- on any national securities exchange or quotation service on which our shares may be listed or quoted at the time of the sale;
- in the over-the-counter market;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any of the foregoing methods of sale; and
- any other method permitted pursuant to applicable law.

The amount of shares to be reoffered or resold by means of this prospectus by each selling stockholder, and any other person with whom such selling stockholder is acting in concert for the purpose of selling our securities, may not exceed, during any three month period, the amount specified in Rule 144(e) of the Securities Act of 1933, as amended.

If the selling stockholder effects such transactions by selling shares of our common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholder or commissions from purchasers of our common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved).

From time to time, one or more of the selling stockholders may distribute, devise, gift, pledge, hypothecate or grant a security interest in some or all of the shares of common stock owned by them. Any such distributees, devisees or donees will be deemed to be selling stockholders. Any such pledgees, secured parties or persons to whom the securities have been hypothecated will, upon foreclosure in the event of default, be deemed to be selling stockholders.

The selling stockholder and any broker-dealer participating in the distribution of our common stock may be deemed to be “underwriters” within the meaning of the Securities Act of 1933, as amended, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act of 1933, as amended. At the time a particular offering of the securities is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of securities being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholder and any discounts, commissions or concessions allowed, reallocated or paid to broker-dealers.

The selling stockholder may choose not to sell any or may choose to sell less than all of our common stock registered pursuant to the registration statement, of which this reoffer prospectus forms a part.

The selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholder and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of our common stock.

We will pay the expenses of the registration of our common stock sold by the selling stockholders, including, without limitation, Securities and Exchange Commission filings fees, compliance with state securities or “blue sky” laws; provided, however, that the selling stockholder will pay all underwriting discounts and selling commissions, if any. As and when we are required to update this reoffer prospectus, we may incur additional expenses.

Once sold under the registration statement, of which this reoffer prospectus forms a part, our common stock will be freely tradable in the hands of persons other than our affiliates. We have notified the selling stockholders of the need to deliver a copy of this reoffer prospectus in connection with any sale of the shares.

In order to comply with certain state securities laws, if applicable, the shares may be sold in such jurisdictions only through registered or licensed brokers or dealers. In certain states, the shares may not be sold unless the shares have been registered or qualified for sale in such state or an exemption from regulation or qualification is available and is complied with. Sales of shares must also be made by the selling stockholders in compliance with all other applicable state securities laws and regulations.

In addition to any shares sold hereunder, selling stockholders may, at the same time, sell any shares of common stock owned by them in compliance with all of the requirements of Rule 144, regardless of whether such shares are covered by this reoffer prospectus.

DESCRIPTION OF SECURITIES

Our common stock, par value \$0.001 per share, is not currently registered under Section 12 of the Securities Exchange Act of 1934, as amended. The following description is a summary of the material terms and provisions of our capital stock, but is not complete. For the complete terms of our capital stock, please refer to our amended and restated certificate of incorporation, any certificates of designation for our preferred stock, and our bylaws, as amended from time to time.

We have authorized 51,000,000 shares of capital stock, par value \$0.001 per share, of which 50,000,000 are shares of common stock and 1,000,000 are shares of "blank check" preferred stock, of which 200 are authorized as Series A Preferred Stock, 600 are authorized as Series B Preferred Stock and 4,200 are authorized as Series C Preferred Stock. On April 17, 2015, there were 13,561,460 shares of common stock issued and outstanding, 2,381 shares of Series C Preferred Stock issued and outstanding and no shares of Series A Preferred Stock or Series B Preferred Stock issued and outstanding.

Common Stock

The holders of common stock are entitled to one vote per share on all matters to be voted upon by stockholders. Holders of our common stock are entitled to receive ratably dividends as may be declared by the board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution, or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities. The common stock has no preemptive or conversion rights, other subscription rights, or redemption or sinking fund provisions.

Each share of common stock entitles the holder to one vote, either in person or by proxy, at meetings of stockholders. The holders are not permitted to vote their shares cumulatively. Accordingly, the stockholders of our common stock who hold, in the aggregate, more than fifty percent of the total voting rights can elect all of our directors and, in such event, the holders of the remaining minority shares will not be able to elect any of such directors. The vote of the holders of a majority of the issued and outstanding shares of common stock entitled to vote thereon is sufficient to authorize, affirm, ratify or consent to such act or action, except as otherwise provided by law.

The rights of the holders of our Series C Preferred Stock, as described below, prohibit us from paying cash dividends to our holders of common stock absent the approval of holders representing at least 67% of the outstanding shares of the Series C Preferred Stock, which holders must include Alpha Capital Anstalt, so long as Alpha Capital Anstalt holds not less than \$100,00 of the Series C Preferred Stock. We have not paid any dividends since our inception, and, subject to our obligations to pay dividends to the holders of our Series C Preferred Stock as described below, we presently anticipate that all earnings, if any, will be retained for development of our business. Even if we are permitted to pay cash dividends in the future, any future disposition of dividends will be at the discretion of our board of directors and will depend upon, among other things, our future earnings, operating and financial condition, capital requirements, and other factors.

Holders of our common stock have no preemptive rights or other subscription rights, conversion rights, redemption or sinking fund provisions. Subject to the rights of the holders of our preferred stock, upon our liquidation, dissolution or winding up, the holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities. There are no provisions in our certificate of incorporation or our by-laws that would prevent or delay a change in our control.

The transfer agent and registrar for our common stock is Action Stock Transfer Corp. The transfer agent's address is 2469 E. Fort Union Blvd., Suite 214, Salt Lake City, Utah 84121. Our common stock is quoted on the OTCQB tier of the OTC Markets Group Inc. under the symbol "BSGM."

Preferred Stock

On June 23, 2014, upon effectiveness of our registration statement on Form S-1, all outstanding shares of our Series A Preferred Stock and our Series B Preferred Stock, including dividends accrued on the shares of preferred stock, automatically converted into shares of our common stock. As a result, there are presently no issued and outstanding shares of Series A Preferred Stock or Series B Preferred Stock.

Each share of the Series C Preferred Stock is entitled to a nine percent (9%) annual dividend on the \$1,000 per share stated value. Unless the Series C Preferred Stock is converted into shares of common stock, the dividends shall accrue and be payable in cash or, subject to the satisfaction of certain conditions, in pay-in-kind shares. Such cumulative dividends are payable quarterly, commencing on September 30, 2013 and on each conversion date; provided, however, that if a holder converts its shares of Series C Preferred Stock into shares of common stock any time prior to February 12, 2016, the holder will be deemed to have earned a make whole amount as if such shares of Series C Preferred Stock had been outstanding until such date. The terms of the Series C Preferred Stock were amended on March 27, 2014 and August 15, 2014. The description herein reflects such amended terms.

In the event that

- (i) we fail to, or announce our intention not to, deliver common stock share certificates upon conversion of our Series C Preferred Stock prior to the seventh trading day after such shares are required to be delivered,
- (ii) we fail for any reason to pay in full the amount of cash due pursuant to our failure to deliver common stock share certificates upon conversion of our Series C Preferred Stock within five calendar days after notice therefor is delivered,
- (iii) we fail to have available a sufficient number of authorized and unreserved shares of common stock to issue to upon a conversion of our Series C Preferred Stock,
- (iv) we fail to observe or perform any other covenant, agreement or warranty contained in, or otherwise commit any breach of our obligations under, the securities purchase agreement, the registration rights agreement, the certificate of designation or the warrants entered into pursuant to the private placement transaction for our Series C Preferred Stock, which failure or breach could have a material adverse effect, and such failure or breach is not cured within 30 calendar days after written notice was delivered,
- (v) we are party to a change of control transaction,
- (vi) we file for bankruptcy or a similar arrangement or are adjudicated insolvent,
- (vii) judgment, including an arbitration award against us, of greater than \$100,000, and such judgment remains unvacated, unbonded or unstayed for a period of 45 calendar days,

the holders of the Series C Preferred Stock are entitled, among other rights, to redeem their shares of Series C Preferred Stock at any time for greater than their stated value or increase the dividend rate on their shares of Series C Preferred Stock to 18%.

Because we failed to complete a financing or series of related financings by February 12, 2014 that resulted in gross proceeds to us of at least \$3 million at a valuation of at least \$30 million, and because we failed to maintain the listing of our common stock on a trading market for more than five trading days in any twelve month period at any time after February 12, 2014, the conversion price of the Series C Preferred Stock was reduced to \$1.50 per share.

In the event of our liquidation or winding up of affairs, the holders of the Series C Preferred Stock will be entitled to a liquidation preference of the stated value plus any accrued but unpaid dividends or any other fees due the holder. The shares of the Series C Preferred Stock rank senior to the rights of the common stock and all other securities exercisable or convertible into shares of common stock.

Any holder of Series C Preferred Stock is entitled at any time to convert any whole or partial number of shares of Series C Preferred Stock into shares of our common stock at a price of \$1.50 per share. The Series C Preferred Stock is subject to full ratchet anti-dilution price protection upon the issuance of equity or equity-linked securities at an effective common stock purchase price of less than \$1.50 per share as well as other customary anti-dilution protection.

In the event we issue any equity or equity-linked securities with terms more favorable than those of the Series C Preferred Stock, any holder of the Series C Preferred Stock may request to amend the terms of such holder's Series C Preferred Stock to be equivalent to the terms of such issued equity or equity-linked securities, subject to certain exempted issuances.

The holders of the Series C Preferred Stock vote together with the holders of our common stock on an as-converted basis, but may not vote the Series C Preferred Stock in excess of the beneficial ownership limitation of the Series C Preferred Stock. The beneficial ownership limitation is 4.99% of our then outstanding shares of common stock following such conversion or exercise, which may be increased to up to 9.99% of our then outstanding shares of common stock following such conversion or exercise upon the request of an individual holder. The beneficial ownership limitation is determined on an individual holder basis, such that the as-converted number of shares of one holder is not included in the shares outstanding when calculating the limitation for a different holder. In addition, absent the approval of holders representing at least 67% of the outstanding shares of the Series C Preferred Stock, which holders must include Alpha Capital Anstalt, so long as Alpha Capital Anstalt holds not less than \$100,000 of Series C Preferred Stock, we may not (i) increase the number of authorized shares of preferred stock, (ii) amend our charter documents, including the terms of the Series C Preferred Stock, in any manner adverse to the holders of the Series C Preferred Stock, including authorizing or creating any class of stock ranking senior to, or otherwise pari passu with, the shares of Series C Preferred Stock as to dividends, redemption or distribution of assets upon a liquidation, or (iii) perform certain covenants, including:

- incur additional indebtedness;
- permit liens on assets;
- repay, repurchase or otherwise acquire more than a de minimis number of shares of common stock;
- pay cash dividends to our stockholders; and
- engage in transactions with affiliates.

Pursuant to the securities purchase agreement for the Series C Preferred Stock, each holder of Series C Preferred Stock has a right to participate in any of our financings, subject to certain exceptions, on a pro-rata basis, for a period expiring 12 months after the effectiveness date of our registration statement on Form S-1.

Delaware Anti-Takeover Law and Provisions of our Certificate of Incorporation and Bylaws

Section 203 of the Delaware General Corporation Law, in general, prohibits a business combination between a corporation and an interested stockholder within three years of the time such stockholder became an interested stockholder, unless:

- prior to such time the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, exclusive of shares owned by directors who are also officers and by certain employee stock plans; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized by the affirmative vote at a stockholders' meeting of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

The term "business combination" is defined to include, among other transactions between an interested stockholder and a corporation or any direct or indirect majority owned subsidiary thereof: a merger or consolidation; a sale, lease, exchange, mortgage, pledge, transfer or other disposition (including as part of a dissolution) of assets having an aggregate market value equal to 10% or more of either the aggregate market value of all assets of the corporation on a consolidated basis or the aggregate market value of all the outstanding stock of the corporation; certain transactions that would result in the issuance or transfer by the corporation of any of its stock to the interested stockholder; certain transactions that would increase the interested stockholder's proportionate share ownership of the stock of any class or series of the corporation or such subsidiary; and any receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation or any such subsidiary.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with, or controlling, or controlled by, the entity or person. The term "owner" is broadly defined to include any person that, individually, with or through that person's affiliates or associates, among other things, beneficially owns the stock, or has the right to acquire the stock, whether or not the right is immediately exercisable, under any agreement or understanding or upon the exercise of warrants or options or otherwise or has the right to vote the stock under any agreement or understanding, or has an agreement or understanding with the beneficial owner of the stock for the purpose of acquiring, holding, voting or disposing of the stock.

The restrictions in Section 203 do not apply to corporations that have elected, in the manner provided in Section 203, not to be subject to Section 203 of the Delaware General Corporation Law or, with certain exceptions, which do not have a class of voting stock that is listed on a national securities exchange or held of record by more than 2,000 stockholders. Our certificate of incorporation and bylaws do not opt out of Section 203.

Section 203 could delay or prohibit mergers or other takeover or change in control attempts with respect to us and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our certificate of incorporation and bylaws:

- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by our board of directors, chairman, chief executive officer, president or secretary; and
- provide advance notice provisions with which a stockholder who wishes to nominate a director or propose other business to be considered at a stockholder meeting must comply.

LEGAL MATTERS

Haynes and Boone, LLP, New York, New York, has passed upon the validity of the shares of our common stock offered by the selling stockholders under this prospectus.

EXPERTS

The financial statements as of and for the years ended December 31, 2014 and 2013 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2014 have been audited by Liggett, Vogt & Webb, P.A., an independent registered public accounting firm, as stated in their report appearing therein, and are incorporated by reference in reliance upon the report of such firm, given upon their authority as experts in auditing and accounting.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The Securities and Exchange Commission allows us to “incorporate by reference” the information we have filed with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and later information that we file with the Securities and Exchange Commission will automatically update and supersede this information. We incorporate by reference the documents listed below and any future documents we file with the Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, subsequent to the date of this prospectus and prior to the termination of the offering (excluding, in either case, information furnished pursuant to Items 2.02 and 7.01 of Form 8-K):

- Our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission on February 20, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 6, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 26, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 6, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 17, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on March 5, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 6, 2015; and
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 14, 2015.

All documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K), after the date of the initial filing of this registration statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold shall also be deemed to be incorporated by reference into the prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file annual, quarterly and current reports and other information with the Securities and Exchange Commission. Such reports and other information can be read and copied at the Securities and Exchange Commission's public reference facilities at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the Securities and Exchange Commission at 1-800-732-0330 for further information on the operation of the public reference facilities. In addition, the Securities and Exchange Commission maintains a website that contains reports and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission. The address of the Securities and Exchange Commission's website is www.sec.gov.

We make available free of charge on or through our website at www.biosigtech.com, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with or otherwise furnish it to the Securities and Exchange Commission. Information on our website is not incorporated by reference in this prospectus and is not a part of this prospectus.

We will provide without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in this prospectus but not delivered with this prospectus (other than an exhibit to these filings, unless we have specifically incorporated that exhibit by reference in this prospectus). Any such request should be addressed to us at: 12424 Wilshire Boulevard, Suite 745, Los Angeles, California 90025, Attention: Gregory Cash, Chief Executive Officer.



BioSig Technologies, Inc.

7,925,190 Shares of Common Stock

PROSPECTUS

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The Securities and Exchange Commission allows us to “incorporate by reference” the information we have filed with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this registration statement, and later information that we file with the Securities and Exchange Commission will automatically update and supersede this information. We incorporate by reference the documents listed below and any future documents we file with the Securities and Exchange Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, subsequent to the date of this registration statement and prior to the termination of the offering (excluding, in either case, information furnished pursuant to Items 2.02 and 7.01 of Form 8-K):

- Our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission on February 20, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 6, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 26, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 6, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 17, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on March 5, 2015;
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 6, 2015; and
- Our Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 14, 2015.

All documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K), after the date of the initial filing of this registration statement and prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold shall also be deemed to be incorporated by reference into the prospectus.

Item 4. Description of Securities.

Our common stock, par value \$0.001 per share, is not currently registered under Section 12 of the Securities Exchange Act of 1934, as amended. The following description is a summary of the material terms and provisions of our capital stock, but is not complete. For the complete terms of our capital stock, please refer to our amended and restated certificate of incorporation, any certificates of designation for our preferred stock, and our bylaws, as amended from time to time.

We have authorized 51,000,000 shares of capital stock, par value \$0.001 per share, of which 50,000,000 are shares of common stock and 1,000,000 are shares of “blank check” preferred stock, of which 200 are authorized as Series A Preferred Stock, 600 are authorized as Series B Preferred Stock and 4,200 are authorized as Series C Preferred Stock. On April 17, 2015, there were 13,561,460 shares of common stock issued and outstanding, 2,381 shares of Series C Preferred Stock issued and outstanding and no shares of Series A Preferred Stock or Series B Preferred Stock issued and outstanding.

Common Stock

The holders of common stock are entitled to one vote per share on all matters to be voted upon by stockholders. Holders of our common stock are entitled to receive ratably dividends as may be declared by the board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution, or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities. The common stock has no preemptive or conversion rights, other subscription rights, or redemption or sinking fund provisions.

Each share of common stock entitles the holder to one vote, either in person or by proxy, at meetings of stockholders. The holders are not permitted to vote their shares cumulatively. Accordingly, the stockholders of our common stock who hold, in the aggregate, more than fifty percent of the total voting rights can elect all of our directors and, in such event, the holders of the remaining minority shares will not be able to elect any of such directors. The vote of the holders of a majority of the issued and outstanding shares of common stock entitled to vote thereon is sufficient to authorize, affirm, ratify or consent to such act or action, except as otherwise provided by law.

The rights of the holders of our Series C Preferred Stock, as described below, prohibit us from paying cash dividends to our holders of common stock absent the approval of holders representing at least 67% of the outstanding shares of the Series C Preferred Stock, which holders must include Alpha Capital Anstalt, so long as Alpha Capital Anstalt holds not less than \$100,00 of the Series C Preferred Stock. We have not paid any dividends since our inception, and, subject to our obligations to pay dividends to the holders of our Series C Preferred Stock as described below, we presently anticipate that all earnings, if any, will be retained for development of our business. Even if we are permitted to pay cash dividends in the future, any future disposition of dividends will be at the discretion of our board of directors and will depend upon, among other things, our future earnings, operating and financial condition, capital requirements, and other factors.

Holders of our common stock have no preemptive rights or other subscription rights, conversion rights, redemption or sinking fund provisions. Subject to the rights of the holders of our preferred stock, upon our liquidation, dissolution or winding up, the holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities. There are no provisions in our certificate of incorporation or our by-laws that would prevent or delay a change in our control.

The transfer agent and registrar for our common stock is Action Stock Transfer Corp. The transfer agent's address is 2469 E. Fort Union Blvd., Suite 214, Salt Lake City, Utah 84121. Our common stock is quoted on the OTCQB tier of the OTC Markets Group Inc. under the symbol "BSGM."

Preferred Stock

On June 23, 2014, upon effectiveness of our registration statement on Form S-1, all outstanding shares of our Series A Preferred Stock and our Series B Preferred Stock, including dividends accrued on the shares of preferred stock, automatically converted into shares of our common stock. As a result, there are presently no issued and outstanding shares of Series A Preferred Stock or Series B Preferred Stock.

Each share of the Series C Preferred Stock is entitled to a nine percent (9%) annual dividend on the \$1,000 per share stated value. Unless the Series C Preferred Stock is converted into shares of common stock, the dividends shall accrue and be payable in cash or, subject to the satisfaction of certain conditions, in pay-in-kind shares. Such cumulative dividends are payable quarterly, commencing on September 30, 2013 and on each conversion date; provided, however, that if a holder converts its shares of Series C Preferred Stock into shares of common stock any time prior to February 12, 2016, the holder will be deemed to have earned a make whole amount as if such shares of Series C Preferred Stock had been outstanding until such date. The terms of the Series C Preferred Stock were amended on March 27, 2014 and August 15, 2014. The description herein reflects such amended terms.

In the event that

- (i) we fail to, or announce our intention not to, deliver common stock share certificates upon conversion of our Series C Preferred Stock prior to the seventh trading day after such shares are required to be delivered,
- (ii) we fail for any reason to pay in full the amount of cash due pursuant to our failure to deliver common stock share certificates upon conversion of our Series C Preferred Stock within five calendar days after notice therefor is delivered,
- (iii) we fail to have available a sufficient number of authorized and unreserved shares of common stock to issue to upon a conversion of our Series C Preferred Stock,
- (iv) we fail to observe or perform any other covenant, agreement or warranty contained in, or otherwise commit any breach of our obligations under, the securities purchase agreement, the registration rights agreement, the certificate of designation or the warrants entered into pursuant to the private placement transaction for our Series C Preferred Stock, which failure or breach could have a material adverse effect, and such failure or breach is not cured within 30 calendar days after written notice was delivered,
- (v) we are party to a change of control transaction,
- (vi) we file for bankruptcy or a similar arrangement or are adjudicated insolvent,
- (vii) judgment, including an arbitration award against us, of greater than \$100,000, and such judgment remains unvacated, unbonded or unstayed for a period of 45 calendar days,

the holders of the Series C Preferred Stock are entitled, among other rights, to redeem their shares of Series C Preferred Stock at any time for greater than their stated value or increase the dividend rate on their shares of Series C Preferred Stock to 18%.

Because we failed to complete a financing or series of related financings by February 12, 2014 that resulted in gross proceeds to us of at least \$3 million at a valuation of at least \$30 million, and because we failed to maintain the listing of our common stock on a trading market for more than five trading days in any twelve month period at any time after February 12, 2014, the conversion price of the Series C Preferred Stock was reduced to \$1.50 per share.

In the event of our liquidation or winding up of affairs, the holders of the Series C Preferred Stock will be entitled to a liquidation preference of the stated value plus any accrued but unpaid dividends or any other fees due the holder. The shares of the Series C Preferred Stock rank senior to the rights of the common stock and all other securities exercisable or convertible into shares of common stock.

Any holder of Series C Preferred Stock is entitled at any time to convert any whole or partial number of shares of Series C Preferred Stock into shares of our common stock at a price of \$1.50 per share. The Series C Preferred Stock is subject to full ratchet anti-dilution price protection upon the issuance of equity or equity-linked securities at an effective common stock purchase price of less than \$1.50 per share as well as other customary anti-dilution protection.

In the event we issue any equity or equity-linked securities with terms more favorable than those of the Series C Preferred Stock, any holder of the Series C Preferred Stock may request to amend the terms of such holder's Series C Preferred Stock to be equivalent to the terms of such issued equity or equity-linked securities, subject to certain exempted issuances.

The holders of the Series C Preferred Stock vote together with the holders of our common stock on an as-converted basis, but may not vote the Series C Preferred Stock in excess of the beneficial ownership limitation of the Series C Preferred Stock. The beneficial ownership limitation is 4.99% of our then outstanding shares of common stock following such conversion or exercise, which may be increased to up to 9.99% of our then outstanding shares of common stock following such conversion or exercise upon the request of an individual holder. The beneficial ownership limitation is determined on an individual holder basis, such that the as-converted number of shares of one holder is not included in the shares outstanding when calculating the limitation for a different holder. In addition, absent the approval of holders representing at least 67% of the outstanding shares of the Series C Preferred Stock, which holders must include Alpha Capital Anstalt, so long as Alpha Capital Anstalt holds not less than \$100,000 of Series C Preferred Stock, we may not (i) increase the number of authorized shares of preferred stock, (ii) amend our charter documents, including the terms of the Series C Preferred Stock, in any manner adverse to the holders of the Series C Preferred Stock, including authorizing or creating any class of stock ranking senior to, or otherwise pari passu with, the shares of Series C Preferred Stock as to dividends, redemption or distribution of assets upon a liquidation, or (iii) perform certain covenants, including:

- incur additional indebtedness;
- permit liens on assets;
- repay, repurchase or otherwise acquire more than a de minimis number of shares of common stock;
- pay cash dividends to our stockholders; and
- engage in transactions with affiliates.

Pursuant to the securities purchase agreement for the Series C Preferred Stock, each holder of Series C Preferred Stock has a right to participate in any of our financings, subject to certain exceptions, on a pro-rata basis, for a period expiring 12 months after the effectiveness date of our registration statement on Form S-1.

Delaware Anti-Takeover Law and Provisions of our Certificate of Incorporation and Bylaws

Section 203 of the Delaware General Corporation Law, in general, prohibits a business combination between a corporation and an interested stockholder within three years of the time such stockholder became an interested stockholder, unless:

- prior to such time the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, exclusive of shares owned by directors who are also officers and by certain employee stock plans; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized by the affirmative vote at a stockholders' meeting of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

The term “business combination” is defined to include, among other transactions between an interested stockholder and a corporation or any direct or indirect majority owned subsidiary thereof: a merger or consolidation; a sale, lease, exchange, mortgage, pledge, transfer or other disposition (including as part of a dissolution) of assets having an aggregate market value equal to 10% or more of either the aggregate market value of all assets of the corporation on a consolidated basis or the aggregate market value of all the outstanding stock of the corporation; certain transactions that would result in the issuance or transfer by the corporation of any of its stock to the interested stockholder; certain transactions that would increase the interested stockholder’s proportionate share ownership of the stock of any class or series of the corporation or such subsidiary; and any receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation or any such subsidiary.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with, or controlling, or controlled by, the entity or person. The term “owner” is broadly defined to include any person that, individually, with or through that person’s affiliates or associates, among other things, beneficially owns the stock, or has the right to acquire the stock, whether or not the right is immediately exercisable, under any agreement or understanding or upon the exercise of warrants or options or otherwise or has the right to vote the stock under any agreement or understanding, or has an agreement or understanding with the beneficial owner of the stock for the purpose of acquiring, holding, voting or disposing of the stock.

The restrictions in Section 203 do not apply to corporations that have elected, in the manner provided in Section 203, not to be subject to Section 203 of the Delaware General Corporation Law or, with certain exceptions, which do not have a class of voting stock that is listed on a national securities exchange or held of record by more than 2,000 stockholders. Our certificate of incorporation and bylaws do not opt out of Section 203.

Section 203 could delay or prohibit mergers or other takeover or change in control attempts with respect to us and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our certificate of incorporation and bylaws:

- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by our board of directors, chairman, chief executive officer, president or secretary; and
- provide advance notice provisions with which a stockholder who wishes to nominate a director or propose other business to be considered at a stockholder meeting must comply.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of the State of Delaware provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person’s conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys’ fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

We are also permitted to apply for, and currently maintain, insurance on behalf of any director, officer, employee or other agent for liability arising out of his actions, whether or not the General Corporation Law of the State of Delaware would permit indemnification.

Item 7. Exemption from Registration Claimed.

The restricted securities that may be reoffered or resold by the selling stockholders pursuant to the reoffer prospectus included herein were stock awards granted under the 2012 Plan and were deemed to be exempt from registration under the Securities Act of 1933, as amended, in reliance on Section 4(a)(2) of the Securities Act of 1933, as amended, as transactions by an issuer not involving a public offering, and/or Rule 701 under the Securities Act of 1933, as amended, which relates to exemptions for offers and sales of securities pursuant to certain compensatory benefit plans.

Item 8. Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
4.1	Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Form S-1 filed on July 22, 2013).
4.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.2 to the Form S-1 filed on July 22, 2013).
4.3	Certificate of Second Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.3 to the Form S-1 filed on July 22, 2013).
4.4	Certificate of Third Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.5 to the Form S-1/A filed on January 21, 2014).
4.5	Certificate of Fourth Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.6 to the Form S-1/A filed on March 28, 2014).
4.6	Certificate of Fifth Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Form 8-K filed on August 21, 2014).
4.7	Bylaws of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.4 to the Form S-1 filed on July 22, 2013).
4.8*	Form of common stock certificate.
5.1*	Opinion of Haynes and Boone, LLP.
23.1*	Consent of Liggett, Vogt & Webb, P.A.
23.2	Consent of Haynes and Boone, LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included in signature page)
99.1	BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Form S-1 filed on July 22, 2013).
99.2	Amendment No. 1 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.27 to the Form S-1/A filed on March 28, 2014).
99.3*	Amendment No. 2 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan.
99.4	Form of Stock Option Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Form S-1 filed on July 22, 2013).
99.5	Form of Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Form 8-K filed on September 5, 2014).

* Filed herewith.

Item 9.Undertakings.

The undersigned registrant hereby undertakes:

- (a)(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Los Angeles, State of California, on April 17, 2015.

BIOSIG TECHNOLOGIES, INC.

By: /s/ Gregory D. Cash
Name: Gregory D. Cash
Title: Chief Executive Officer

Power of Attorney

Each person whose signature appears below hereby appoints each of Gregory D. Cash and Kenneth L. Londoner, severally, acting alone and without the other, his or her true and lawful attorney-in-fact, with full power of substitution, and with the authority to execute in the name of each such person, any and all amendments (including without limitation, post-effective amendments) to this registration statement on Form S-8, to sign any and all additional registration statements relating to the same offering of securities as this registration statement, including any amendment to this registration statement for the purpose of registering additional shares in accordance with General Instruction E to Form S-8, and to file such registration statements with the Securities and Exchange Commission, together with any exhibits thereto and other documents therewith, necessary or advisable to enable the registrant to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, which amendments may make such other changes in the registration statement as the aforesaid attorney-in-fact executing the same deems appropriate.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Gregory D. Cash</u> Gregory D. Cash	President, Chief Executive Officer and Director (principal executive officer)	April 17, 2015
<u>/s/ Steve Chaussy</u> Steve Chaussy	Chief Financial Officer (principal financial and accounting officer)	April 17, 2015
<u>/s/ Kenneth L. Londoner</u> Kenneth L. Londoner	Executive Chairman and Director	April 17, 2015
<u>/s/ Asher Holzer, Ph.D.</u> Asher Holzer, Ph.D.	Director	April 17, 2015
<u>/s/ Roy T. Tanaka</u> Roy T. Tanaka	Director	April 17, 2015
<u>/s/ Jonathan Steinhouse</u> Jonathan Steinhouse	Director	April 17, 2015
<u>/s/ Patrick J. Gallagher</u> Patrick J. Gallagher	Director	April 17, 2015
<u>/s/ Seth H.Z. Fischer</u> Seth H.Z. Fischer	Director	April 17, 2015
<u>/s/ Jeffrey F. O'Donnell</u> Jeffrey F. O'Donnell	Director	April 17, 2015
<u>/s/ Jerome Zeldis, M.D., Ph.D.</u> Jerome Zeldis, M.D., Ph.D.	Director	April 17, 2015

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with rights of survivorship and not as tenants in common

UNIF GIFT MIN ACT - Custodian
(Cust) (Minor)
under Uniform Gifts to Minors Act
(State)
UNIF TRF MIN ACT - Custodian (until age.....)
(Cust)
.....under Uniform Transfers (Minor)
to Minors Act.....
(State)

Additional abbreviations may also be used though not in the above list.

FOR VALUE RECEIVED, _____ hereby sell, assign and transfer unto

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE _____

(PLEASE PRINT OR TYPE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

_____ Shares
of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ Attorney
to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _____

X _____

X _____

NOTICE: THE SIGNATURE(S) TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME(S) AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATEVER.

April 17, 2015

BioSig Technologies
12424 Wilshire Boulevard, Suite 745
Los Angeles, California 90025

Re: BioSig Technologies, Inc. Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to BioSig Technologies, Inc., a Delaware corporation (the "Company"), in connection with the preparation of the Company's registration statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), filed by the Company with the Securities and Exchange Commission (the "Commission") on the date hereof. The Registration Statement relates to the registration of (i) up to 880,933 shares of common stock of the Company, par value \$0.001 per share (the "Common Stock"), issuable under the BioSig Technologies, Inc. 2012 Equity Incentive Plan (the "2012 Plan"), (ii) up to 6,505,190 shares of Common Stock issuable pursuant to options previously granted under the 2012 Plan and (iii) 1,420,000 shares of restricted stock issued under the 2012 (the shares listed in (i) though (iii) the "Shares," the shares listed in (i) and (ii), the "Option Shares" and the shares listed in (iii) the "Restricted Shares").

The opinion expressed herein is limited exclusively to the General Corporation Law of the State of Delaware (the "DGCL"), applicable provisions of the Delaware Constitution and judicial decisions interpreting the DGCL and such provisions of the Delaware Constitution, and the federal laws of the United States of America, and we have not considered, and express no opinion on, any other laws or the laws of any other jurisdiction. The opinions expressed herein are rendered only to you in connection with the Registration Statement. We express no opinion as to any matter other than as expressly set forth above, and no opinion on any other matter may be inferred or implied herefrom. The opinions expressed herein are rendered as of the date hereof and we expressly disclaim any obligation to update this letter or advise you of any change in any matter after the date hereof. The opinions expressed herein may not be relied upon by you for any other purpose, or be furnished to, quoted to or relied upon by any other person, firm or corporation or for any other purpose.

In rendering the opinions expressed herein, we have examined and relied upon the originals, or copies certified to our satisfaction, of (i) the Registration Statement; (ii) the Company's Certificate of Incorporation and any amendments to date certified by the Secretary of State of the State of Delaware (the "Certificate of Incorporation"); (iii) the Company's Bylaws and any amendments to date certified by the Secretary of the Company (the "Bylaws"); (iv) the minutes and records of the corporate proceedings of the Company with respect to the authorization of the issuance of the Shares and related matters thereto; (v) the 2012 Plan; (vi) the form of common stock certificate; and (vii) such other records, documents and instruments as we have deemed necessary for the expression of the opinions stated herein. As to the various questions of fact material to the opinion expressed below, we have relied solely upon certificates or comparable documents of officers and representatives of the Company without independent check or verification of their accuracy.

In making such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents.

In rendering the opinions set forth herein, we have assumed that, at the time of the issuance of the Option Shares, (i) the resolutions of the Company referred to above will not have been modified or rescinded, (ii) there will not have occurred any change in the law affecting the authorization, execution, delivery, validity or fully paid status of the Common Stock, (iii) the Company will receive consideration for the issuance of the Option Shares that is at least equal to the par value of the Common Stock, (iv) all requirements of the DGCL (as defined above), the Certificate of Incorporation and the Bylaws will be complied with when the Option Shares are issued, (v) sufficient shares of Common Stock will be authorized for issuance under the Certificate of Incorporation of the Company that have not otherwise been issued or reserved for issuance and (vi) neither the issuance nor sale of the Option Shares will result in a violation of any agreement or instrument then binding upon the Company or any order of any court or governmental body having jurisdiction over the Company.

Based on the foregoing, subject to the assumptions and limitations stated herein, and having due regard for the legal considerations we deem relevant, we are of the opinion that (i) upon issuance of the Option Shares in accordance with the terms of the 2012 Plan and the instruments executed pursuant to such 2012 Plan, the Option Shares will be validly issued, fully paid and non-assessable and (ii) the Restricted Shares have been validly issued and are fully paid and non-assessable, subject to the provisions of the applicable award agreement.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to all references to us in the Registration Statement. In giving this consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Haynes and Boone, LLP

Haynes and Boone, LLP

CONSENT OF INDEPENDENT REGISTERED CERTIFIED PUBLIC ACCOUNTANTS

We hereby consent to the incorporation by reference in this Form S-8 Registration Statement of BioSig Technologies, Inc. of our report dated February 20, 2015, relating to the financial statements of BioSig Technologies, Inc., which appear in the Annual Form 10-K of BioSig Technologies, Inc. for the years ended December 31, 2014 and 2013. Our report includes an explanatory paragraph expressing substantial doubt regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Liggett, Vogt & Webb, P.A.

New York, New York
April 17, 2015

**SECOND AMENDMENT
TO THE
BIOSIG TECHNOLOGIES, INC. 2012 EQUITY INCENTIVE PLAN**

This SECOND AMENDMENT TO THE BIOSIG TECHNOLOGIES, INC. 2012 EQUITY INCENTIVE PLAN (this "*Amendment*"), effective as of October 14, 2014, is made and entered into by BioSig Technologies, Inc., a Delaware corporation (the "*Company*"). Terms used in this Amendment with initial capital letters that are not otherwise defined herein shall have the meanings ascribed to such terms in the BioSig Technologies, Inc. 2012 Equity Incentive Plan (the "*Plan*").

RECITALS

WHEREAS, Section 18 of the Plan provides that the Board of Directors of the Company (the "*Board*") may amend the Plan at any time; and

WHEREAS, the Board desires to amend the Plan, to increase the number of shares of Common Stock that may be delivered pursuant to Awards under the Plan by an additional two million eight hundred thousand (2,800,000) shares.

NOW, THEREFORE, in accordance with Section 18 of the Plan, the Company hereby amends the Plan as follows:

1. Section 3(a) of the Plan is hereby amended by deleting said section in its entirety and substituting in lieu thereof the following new Section 3(a):

(a) Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is 7,306,123 Shares, plus (i) any Shares that, as of the date of initial stockholder approval of this Plan, have been reserved but not issued pursuant to any awards granted under the BioSig Technologies, Inc. 2011 Long-Term Incentive Plan (the "2011 Plan") and are not subject to any awards granted thereunder, and (ii) any Shares subject to stock options or similar awards granted under the 2011 Plan that expire or otherwise terminate without having been exercised in full and Shares issued pursuant to awards granted under the 2011 Plan that are forfeited to or repurchased by the Company, with the maximum number of Shares to be added to the Plan pursuant to clauses (i) and (ii) equal to 1,500,000 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

2. Except as expressly amended by this Amendment, the Plan shall continue in full force and effect in accordance with the provisions thereof.

* * * * *

*[Remainder of Page Intentionally Left Blank
Signature Page Follows.]*

IN WITNESS WHEREOF, the Company has caused this Amendment to be duly executed as of the date first written above.

BIOSIG TECHNOLOGIES, INC.

By: /s/ Kenneth L. Londoner
Name: Kenneth L. Londoner
Title: Chairman of the Board of Directors