# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

FORM S-1

on

FORM S-3

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)

3845

(Primary Standard Industrial Classification Code Number)

<u>26-4333375</u>

(I.R.S. Employer Identification Number)

12424 Wilshire Blvd., Suite 745 Los Angeles, CA 90025 (512) 329-2643

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

Kenneth Londoner Chief Executive Officer 12424 Wilshire Blvd., Suite 745 Los Angeles, CA 90025 (512) 329-2643

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

Copies to:

Rick A. Werner, Esq. Haynes and Boone, LLP 30 Rockefeller Plaza, 26th Floor New York, New York 10112 Tel. (212) 659-7300 Fax (212) 884-8234

Statement.	inc: As soon as practicable after the effective date of this Registration
If the only securities being registered on this form are being offered p following box. $\Box$	pursuant to dividend or interest reinvestment plans, please check the
If any of the securities being registered on this Form are to be offe Securities Act of 1933 check the following box. ⊠	red on a delayed or continuous basis pursuant to Rule 415 under the
	pursuant to Rule 462(b) under the Securities Act, please check the number of the earlier effective registration statement for the same
If this Form is a post-effective amendment filed pursuant to Rule 4 Securities Act registration statement number of the earlier effective research.	$162(c)$ under the Securities Act, check the following box and list the egistration statement for the same offering. $\Box$
If this Form is a post-effective amendment filed pursuant to Rule 4 Securities Act registration statement number of the earlier effective re-	$162(d)$ under the Securities Act, check the following box and list the egistration statement for the same offering. $\Box$
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Non-accelerated filer □ (Do not check if a smaller reporting company)	Smaller reporting company ⊠
Emerging growth company ⊠	
If an emerging growth company, indicate by check mark if the registromplying with any new or revised financial accounting standards pro-	

#### **EXPLANATORY NOTE**

On May 16, 2018, BioSig Technologies, Inc. (the "Company") filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 File No. 333-224985 (the "Registration Statement" or the "Form S-1"), to register the offer and sale of (i) 400,000 shares of common stock to be offered by the selling stockholders upon the conversion of 1,000 shares of our Series E Convertible Preferred Stock, at a conversion price of \$3.75 per share, (ii) 117,757 shares of our common stock issuable as a make-whole dividend of 7% per annum upon the conversion of our Series E Convertible Preferred Stock and (iii) 273,334 shares of our common stock to be offered by the selling stockholders upon the exercise of outstanding common stock purchase warrants.

This Amendment No. 1 to Form S-1 on Form S-3 (this "Amendment") is being filed to (i) remove from this Registration Statement 25,082 shares of common stock issuable as a make-whole divided (as described below) and (ii) convert the Form S-1 into a registration statement on Form S-3, and contains an updated prospectus. The Company inadvertently overestimated the number of shares of common stock issuable as a make-whole dividend upon conversion of Series E Preferred Stock by 25,082 shares and hereby removes such shares from this Registration Statement. All filing fees payable in connection with the registration of these securities were previously paid by the registrant in connection with the filing of the registration statement on Form S-1.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

#### SUBJECT TO COMPLETION, DATED SEPTEMBER 28, 2018

#### PRELIMINARY PROSPECTUS



Up to 292,358 Shares of Common Stock, up to 200,316 Shares of Common Stock Underlying Series E Convertible Preferred Stock, and up to 273,334 Shares of Common Stock Underlying Warrants

This prospectus relates to the resale up to (i) 250,000 shares of common stock issued upon the conversion of Series E Preferred Stock at a conversion price of \$3.75 per share, (ii) 150,000 shares of common stock issuable upon the conversion of Series E Preferred Stock at a conversion price of \$3.75 per share, (iii) 42,358 shares of our common stock issued as a make-whole dividend of 7% per annum upon the conversion of our Series E Preferred Stock, (iv) 50,316 shares of our common stock issuable as a make-whole dividend of 7% per annum upon the conversion of our Series E Preferred Stock, and (v) 273,334 shares of our common stock to be offered by the selling stockholders upon the exercise of outstanding common stock purchase warrants.

Our common stock is listed on the Nasdaq Capital Market ("Nasdaq") under the symbol "BSGM." On September 27, 2018, the last reported sale price of our shares of common stock on Nasdaq was \$5.80 per share.

We will not receive any of the proceeds from the sale of common stock by the selling stockholders. However, we will receive proceeds from the exercise of the warrants if the warrants are exercised for cash. We intend to use those proceeds, if any, for general corporate purposes. All expenses of registration incurred in connection with this offering are being borne by us, but all selling and other expenses incurred by the selling stockholders will be borne by the selling stockholders.

We qualify as an "emerging growth company" as defined in the Jumpstart our Business Startups Act of 2012, or JOBS Act, and have elected to comply with certain reduced public company reporting requirements in this and future filings.

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 prospectus before making a decision to purchase our stock.

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

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 prospectus is

, 2018

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#### ABOUT THIS PROSPECTUS

You should rely only on the information contained in or incorporated by reference in this prospectus and any applicable prospectus supplement. We have not authorized anyone to provide you with different or additional information. If anyone provides you with different or inconsistent information, you should not rely on it. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of securities described in this prospectus. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement, as well as information we have previously filed with the Commission and incorporated by reference herein, is accurate as of the date on the front of those documents only. Our business, financial condition, results of operations and prospects may have changed since those dates.

#### PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus or incorporated by reference in this prospectus. This summary provides an overview of selected information and does not contain all of the information you should consider before investing in our securities. You should read this entire prospectus carefully, especially the section titled "Risk Factors" and our consolidated financial statements and related notes included elsewhere in this prospectus, before making an investment decision. In this prospectus, unless the context requires otherwise, all references to "we," "our," "us" and the "Company" refer to BioSig Technologies, Inc.

#### **Our Company**

We are a development stage medical device company that is developing a proprietary biomedical signal processing technology platform to extract information from physiologic signals. Our initial emphasis is on providing intracardiac signal information to electrophysiologists during electrophysiology (EP) studies and cardiac catheter ablation of atrial fibrillation (AF) and ventricular tachycardia (VT). Cardiac catheter ablation is a procedure that involves delivery of energy through the tip of a catheter that scars or destroys heart tissue in order to correct heart rhythm disturbances. In August 2018 we received FDA 510(k) clearance for our PURE (Precise Uninterrupted Real-time evaluation of Electrograms) EP System. The PURE EP<sup>TM</sup> System is a non-invasive computerized system intended for acquiring, digitizing, amplifying, filtering, measuring and calculating, displaying, recording and storing of electrocardiographic and intracardiac signals for patients undergoing electrophysiology (EP) procedures in an EP laboratory. The system is indicated for use under the supervision of licensed healthcare practitioners who are responsible for interpreting the data collected by the system. The PURE EP System aims to minimize noise and artifacts from cardiac recordings and acquire high-fidelity cardiac signals. Improving cardiac signals may potentially increase the diagnostic value of these signals, thereby possibly improving accuracy and efficiency of the EP studies and related procedures. The PURE EP System is intended to be used in addition to existing electrophysiology recorders. We believe that data provided by the PURE EP System will increase the workload ability and enhance the capabilities of the typical electrophysiology laboratory.

#### Implications of Being an Emerging Growth Company

As a company with less than \$1.07 billion in revenues during our last fiscal year, we are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in April 2012, and therefore we intend to take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions until the earliest to occur of (i) the last day of the fiscal year during which we had total annual gross revenues of \$1.07 billion; (ii) the last day of the fiscal year following the fifth anniversary of the date of the first sale of common stock under our registration statement on Form S-1 that became effective on June 23, 2014; (iii) the date on which we have, during the previous 3-year period, issued more than \$1 billion in non-convertible debt; or (iv) the date on which we are deemed to be a "large accelerated filer," as defined by the Securities and Exchange Commission, which would generally occur upon our attaining a public float of at least \$700 million. We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We have taken advantage of some reduced reporting burdens in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold securities.

#### **Recent Developments**

Nasdaq Listing

On September 19, 2018 our application to list our common stock on Nasdaq was approved and on September 21, 2018 our stock began trading on the Nasdaq Capital Market.

Reverse Stock Split

Effective as of 5:00 p.m. Eastern Time on September 10, 2018, we amended our amended and restated certificate of incorporation in order to effectuate a 1-for-2.5 reverse stock split of our outstanding shares of common stock. We have adjusted all outstanding restricted stock units, stock options, preferred stock and warrants entitling the holders to purchase shares of our common stock as a result of the reverse stock split, as required by the terms of these securities. In particular, we have reduced the conversion ratio for each security, and increased the exercise price in accordance with the terms of each security based on the reverse stock split ratio (i.e., the number of shares issuable under such securities has been divided by thirty-five, and the exercise price per share has been multiplied by thirty-five). Also, we reduced the number of shares reserved for issuance under the Company's 2012 Equity Incentive Plan, proportionately based on the reverse stock split ratio. The reverse stock split did not otherwise affect any of the rights currently accruing to holders of our common stock, preferred stock, options or warrants exercisable for our common stock. All share and related option and warrant information presented in this prospectus have been retroactively adjusted to reflect the reduced number of shares outstanding and the increase in share price which resulted from this action.

### **Corporate Information**

We were formed as BioSig Technologies, Inc., a Nevada corporation, in February 2009. 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.

Our principal executive offices are located at 12424 Wilshire Blvd Suite 745 Los Angeles, CA 90025, telephone number (512) 329-2643. 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.

#### THE OFFERING

Common stock offered by the selling stockholders:

Up to (i) 250,000 shares of common stock issued upon the conversion of Series E Preferred Stock at a conversion price of \$3.75 per share, (ii) 150,000 shares of common stock issuable upon the conversion of Series E Preferred Stock at a conversion price of \$3.75 per share, (iii) 42,358 shares of our common stock issued as a make-whole dividend of 7% per annum upon the conversion of our Series E Preferred Stock, (iv) 50,316 shares of our common stock issuable as a make-whole dividend of 7% per annum upon the conversion of our Series E Preferred Stock, and (v) 273,334 shares of our common stock to be offered by the selling stockholders upon the exercise of outstanding common stock purchase warrants.

Common stock outstanding prior to the

offering:

Use of proceeds:

16,329,755

Common stock outstanding after this offering: 16,803,405(1)

We will not receive any proceeds from the sale of the common stock offered by the selling stockholders. However, we will receive proceeds from the exercise price of the warrants if the warrants are exercised for cash. We intend to use those proceeds, if any, for general

corporate purposes.

NASDAQ trading symbol:

"BSGM"

Risk factors: You should carefully consider the information set forth in this prospectus and, in

particular, the specific factors set forth in the "Risk Factors" section beginning on page 4 of this prospectus before deciding whether or not to invest in shares of our common

The number of shares of common stock outstanding after the offering is based upon 16,329,755 shares outstanding as of September 26, 2018, and assumes the conversion of all remaining Series E Preferred Stock, the issuance of the full make-whole dividend in connection with the conversion of the Series E Preferred Stock and exercise of all warrants with respect to those shares being registered for resale pursuant to the registration statement of which this prospectus forms a part.

The number of shares of common stock outstanding after this offering excludes:

- 3,358,130 shares of common stock issuable upon the exercise of currently outstanding options with a weighted average exercise price of \$5.40 per share;
- 1,400,694 shares of common stock available for future issuance under the BioSig Technologies, Inc. 2012 Equity Incentive Plan;
- 42,900 shares of common stock issuable for accrued dividends on our Series C Preferred Stock as of June 30, 2018;
- 126,671 shares of common stock issuable upon the conversion of our Series C Preferred Stock; and
- 4,815,172 shares of common stock issuable upon exercise of warrants with a weighted average exercise price of \$4.80 per share.

#### RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following factors and other information in this prospectus or any accompanying prospectus supplement before making a decision to invest in our common stock. If any of the risks actually occur, our business, financial conditions and operating results may be materially and adversely affected. In that event, the trading price of our common stock may decline, and you could lose all or part of your investment.

### Risks Related to Our Business and Industry

Because our condition as a going concern is in doubt, we will be forced to cease our business operations unless we can raise sufficient funds to satisfy our working capital needs.

As shown in the financial statements incorporated by reference hereto, during years ended December 31, 2017 and 2016, we incurred net losses attributable to common stockholders of \$12,815,620 and \$11,697,210, respectively and used \$7,470,054 in cash for operating activities for the year ended December 31, 2017. As of September 26, 2018, we had cash on hand of approximately \$7,325,234 million. These factors, among others, raise substantial doubt that we will be able to continue as a going concern for a reasonable period of time.

Our existence is dependent upon management's ability to develop profitable operations. We are devoting substantially all of our efforts to developing product candidates and there can be no assurance that our efforts will be successful. There is no assurance that can be given that our actions will result in profitable operations or the resolution of our liquidity problems.

#### Because we are a development stage company with one product near commercialization, we expect to incur additional operating losses.

We are a development stage company and we expect to incur additional operating expenses over the next several years as our research, development, pre-clinical testing, regulatory approvals and clinical trial activities increase. The amount of our future losses and when, if ever, we will achieve profitability are uncertain. We have no products that have generated any commercial revenue and we are uncertain when we expect to generate revenues from the commercial sale of our PURE EP System, which received FDA 510(k) clearance in August 2018, if ever. Our ability to generate revenue and achieve profitability will depend on, among other things, the following:

- successful completion of the pre-clinical and clinical development of our products;
- obtaining necessary regulatory approvals from the U.S. Food and Drug Administration or other regulatory authorities;
- establishing manufacturing, sales, and marketing arrangements, either alone or with third parties; and
- raising sufficient funds to finance our activities.

We might not succeed at all, or at any, of these undertakings. If we are unsuccessful at some or all of these undertakings, our business, prospects, and results of operations may be materially adversely affected.

### Our product candidates are in continued development and may not be successfully developed or commercialized.

Although our PURE EP System, received FDA 510(k) clearance from the U.S. Food and Drug Administration (FDA), it is still in the development stage and will require substantial further capital expenditures, development, testing, and may need additional regulatory clearances prior to commercialization, especially given that we have not yet completed clinical testing on this product. Therefore, it may not be commercially available for a number of months. The continued development of our product candidates is dependent upon our ability to obtain sufficient financing. However, even if we are able to obtain the requisite financing to fund our development program, we cannot assure you that our product candidates will be successfully developed or commercialized. Our failure to develop, manufacture or receive regulatory approval for or successfully commercialize any of our product candidates could result in the failure of our business and a loss of all of your investment in our company.

We expect to derive our revenue from sales of our PURE EP System and other products we may develop. If we fail to generate revenue from these sources, our results of operations and the value of our business will be materially and adversely affected.

We expect our revenue to be generated from sales of our PURE EP System and other products we may develop. Future sales of these products, if any, will be subject to, among other things, commercial and market uncertainties that may be outside our control. If we fail to generate our intended revenues from these products, our results of operations and the value of our business and securities would be materially and adversely affected.

We may need to finance our future cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements. Any additional funds that we obtain may not be on terms favorable to us or our stockholders and may require us to relinquish valuable rights.

It is unlikely that we will generate revenues from our products until we have conducted clinical trials and receive necessary clearances from regulatory authorities for our products. Therefore, until we have a commercially viable product, we will have to fund all of our operations and capital expenditures from cash on hand, public or private equity offerings, debt financings, bank credit facilities or corporate collaboration and licensing arrangements. We believe that our existing cash on hand will be sufficient to enable us to fund our projected operating requirements for approximately the next seven months. However, we may need to raise additional funds more quickly if one or more of our assumptions prove to be incorrect or if we choose to expand our product development efforts more rapidly than we presently anticipate. We also may decide to raise additional funds before we require them if we are presented with favorable terms for raising capital.

If we seek to sell additional equity or debt securities, obtain a bank credit facility or enter into a corporate collaboration or licensing arrangement, we may not obtain favorable terms for us and/or our stockholders or be able to raise any capital at all, all of which could result in a material adverse effect on our business and results of operations. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations. Raising additional funds through collaboration or licensing arrangements with third parties may require us to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or to grant licenses on terms that may not be favorable to us or our stockholders. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts and forego attractive business opportunities, all of which could have an adverse impact on our business and results of operations.

### The results of clinical studies may not support the usefulness of our technology.

Conducting clinical trials is a long, expensive and uncertain process that is subject to delays and failure at any stage. Clinical trials can take months or years. The commencement or completion of any of our clinical trials may be delayed or halted for numerous reasons, including:

- the U.S. Food and Drug Administration may not approve a clinical trial protocol or a clinical trial, or may place a clinical trial on hold:
- subjects may not enroll in clinical trials at the rate we expect or we may not follow up on subjects at the rate we expect;
- subjects may experience events unrelated to our products;
- third-party clinical investigators may not perform our clinical trials consistent with our anticipated schedule or the clinical trial
  protocol and good clinical practices, or other third-party organizations may not perform data collection and analysis in a timely or
  accurate manner;
- interim results of any of our clinical trials may be inconclusive or negative;
- regulatory inspections of our clinical trials may require us to undertake corrective action or suspend or terminate the clinical trials if
  investigators find us not to be in compliance with regulatory requirements; or
- governmental regulations or administrative actions may change and impose new requirements, particularly with respect to reimbursement.

Results of pre-clinical studies do not necessarily predict future clinical trial results and previous clinical trial results may not be repeated in subsequent medical trials. We may experience delays, cost overruns and project terminations despite achieving promising results in pre-clinical testing or early clinical testing. In addition, the data obtained from clinical trials may be inadequate to support approval or clearance of a submission. The U.S. Food and Drug Administration may disagree with our interpretation of the data from our clinical trials, or may find the clinical trial design, conduct or results inadequate to demonstrate the safety and effectiveness of the product candidate. The U.S. Food and Drug Administration may also require us to conduct additional pre-clinical studies or clinical trials that could further delay approval of our products. If we are unsuccessful in receiving U.S. Food and Drug Administration approval of a product, we would not be able to commercialize the product in the U.S., which could seriously harm our business. Moreover, we face similar risks in other jurisdictions in which we may sell or propose to sell our products.

## The medical device industry is subject to stringent regulation and failure to obtain regulatory approval will prevent commercialization of our products.

Medical devices are subject to extensive and rigorous regulation by the U.S. Food and Drug Administration pursuant to the Federal Food, Drug, and Cosmetic Act, by comparable agencies in foreign countries and by other regulatory agencies and governing bodies. Under the Federal Food, Drug, and Cosmetic Act and associated regulations, manufacturers of medical devices must comply with certain regulations that cover the composition, labeling, testing, clinical study, manufacturing, packaging and distribution of medical devices. In addition, medical devices must receive U.S. Food and Drug Administration clearance or approval before they can be commercially marketed in the U.S., and the U.S. Food and Drug Administration may require testing and surveillance programs to monitor the effects of approved products that have been commercialized and can prevent or limit further marketing of a product based on the results of these post-market evaluation programs. The process of obtaining marketing clearance from the U.S. Food and Drug Administration for new products could take a significant period of time, require the expenditure of substantial resources, involve rigorous pre-clinical and clinical testing, require changes to the products and result in limitations on the indicated uses of the product. In addition, if we seek regulatory approval in non-U.S. markets, we will be subject to further regulatory approvals that may require additional costs and resources. There is no assurance that we will obtain necessary regulatory approvals in a timely manner, or at all.

Our product, the PURE EP System, has received 510(k) marketing clearance from the U.S. Food and Drug Administration which will permit us to market this product in the U.S. However, if we intend to market our product for additional medical uses or indications, we will need to submit additional 510(k) applications to the U.S. Food and Drug Administration that are supported by satisfactory clinical trial results specifically for the additional indication. The results of our initial clinical trials may not provide sufficient evidence to allow the U.S. Food and Drug Administration to grant us such additional marketing clearances and even additional trials requested by the U.S. Food and Drug Administration may not result in our obtaining 510(k) marketing clearance for our product. The failure to obtain U.S. Food and Drug Administration marketing clearance for the PURE EP System, any additional indications for the PURE EP System or any other of our future products would have a material adverse effect on our business.

## Our products may be subject to extensive post-approval regulation.

Once a product is approved by the relevant regulatory body for our targeted commercialization market, numerous post-approval requirements apply, including but not limited to requirements relating to manufacturing, labeling, packaging, advertising and record keeping. Even if regulatory approval of a product is obtained, the approval may be subject to limitations on the uses for which the product may be marketed, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Any such post-approval requirement could reduce our revenues, increase our expenses and render the approved product candidate not commercially viable. If we fail to comply with the regulatory requirements of the applicable regulatory authorities, or if previously unknown problems with any approved commercial products, manufacturers or manufacturing processes are discovered, we could be subject to administrative or judicially imposed sanctions or other negative consequences, including:

- restrictions on our products, manufacturers or manufacturing processes;
- warning letters and untitled letters;
- civil penalties and criminal prosecutions and penalties;

- fines;
- injunctions;
- product seizures or detentions;
- import or export bans or restrictions;
- voluntary or mandatory product recalls and related publicity requirements;
- suspension or withdrawal of regulatory approvals;
- total or partial suspension of production; and
- refusal to approve pending applications for marketing approval of new products or of supplements to approved applications.

## Regulations are constantly changing, and in the future our business may be subject to additional regulations that increase our compliance costs.

We believe we understand the current laws and regulations to which our products will be subject in the future. However, federal, state and foreign laws and regulations relating to the sale of our products are subject to future changes, as are administrative interpretations of regulatory agencies. If we fail to comply with such federal, state or foreign laws or regulations, we may fail to obtain regulatory approval for our products and, if we have already obtained regulatory approval, we could be subject to enforcement actions, including injunctions preventing us from conducting our business, withdrawal of clearances or approvals and civil and criminal penalties. In the event that federal, state, and foreign laws and regulations change, we may incur additional costs to seek government approvals, in addition to the clearance from the U.S. Food and Drug Administration in order to sell or market our products. If we are slow or unable to adapt to changes in existing regulatory requirements or the promulgation of new regulatory requirements or policies, we or our licensees may, following approval, lose marketing approval for our products which will impact our ability to conduct business in the future.

### The market for our technology and revenue generation avenues for our products may be slow to develop, if at all.

The market for our products may be slower to develop or smaller than estimated or it may be more difficult to build the market than anticipated. The medical community may resist our products or be slower to accept them than we anticipate. Revenues from our products may be delayed or costs may be higher than anticipated which may result in our need for additional funding. We anticipate that our principal route to market will be through commercial distribution partners. These arrangements are generally non-exclusive and have no guaranteed sales volumes or commitments. The partners may be slower to sell our products than anticipated. Any financial, operational or regulatory risks that affect our partners could also affect the sales of our products. In the current economic environment, hospitals and clinical purchasing budgets may exercise greater restraint with respect to purchases, which may result in purchasing decisions being delayed or denied. If any of these situations were to occur this could have a material adverse effect on our business, financial condition, results of operations and future prospects.

### If we seek to market our products in foreign jurisdictions, we may need to obtain regulatory approval in these jurisdictions.

In order to market our products in the European Union and many other foreign jurisdictions, we may need to obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. Approval procedures vary among countries (except with respect to the countries that are part of the European Economic Area) and can involve additional clinical testing. The time required to obtain approval may differ from that required to obtain U.S. Food and Drug Administration approval. Should we decide to market our products abroad, we may fail to obtain foreign regulatory approvals on a timely basis, if at all. Approval by the U.S. Food and Drug Administration does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority, including obtaining CE Mark approval, does not ensure approval by regulatory authorities in other foreign countries or by the U.S. Food and Drug Administration. We may be unable to file for, and may not receive, necessary regulatory approvals to commercialize our products in any foreign market, which could adversely affect our business prospects.

#### The electrophysiology market is highly competitive.

There are a number of groups and organizations, such as healthcare, medical device and software companies in the electrophysiology market that may develop a competitive offering to our products. The largest companies in the electrophysiology market are GE, Johnson & Johnson, Boston Scientific, Siemens and Abbott. All of these companies have significantly greater resources, experience and name recognition than we possess. There is no assurance that they will not attempt to develop similar or superior products, that they will not be successful in developing such products or that any products they may develop will not have a competitive advantage over our products. If we experience delayed regulatory approvals or disputed clinical claims, we may not have a commercial or clinical advantage over competitors' products that we believe we currently possess. Should a superior offering come to market, this could have a material adverse effect on our business, financial condition, results of operations and future prospects.

## We rely on key officers, consultants and scientific and medical advisors, and their knowledge of our business and technical expertise would be difficult to replace.

We are highly dependent on our officers, consultants and scientific and medical advisors because of their expertise and experience in medical device development. We do not have "key person" life insurance policies for any of our officers. Moreover, if we are unable to obtain additional funding, we will be unable to meet our current and future compensation obligations to such employees and consultants. In light of the foregoing, we are at risk that one or more of our consultants or employees may leave our company for other opportunities where there is no concern about such employers fulfilling their compensation obligations, or for other reasons. The loss of the technical knowledge and management and industry expertise of any of our key personnel could result in delays in product development, loss of customers and sales and diversion of management resources, which could adversely affect our results of operations.

#### We may fail to attract and retain qualified personnel.

We expect to rapidly expand our operations and grow our sales, research and development and administrative operations. This expansion is expected to place a significant strain on our management and will require hiring a significant number of qualified personnel. Accordingly, recruiting and retaining such personnel in the future will be critical to our success. There is intense competition from other companies, research and academic institutions, government entities and other organizations for qualified personnel in the areas of our activities. Many of these companies, institutions and organizations have greater resources than we do, along with more prestige associated with their names. If we fail to identify, attract, retain and motivate these highly skilled personnel, we may be unable to continue our marketing and development activities, and this could have a material adverse effect on our business, financial condition, results of operations and future prospects.

## If we do not effectively manage changes in our business, these changes could place a significant strain on our management and operations.

Our ability to grow successfully requires an effective planning and management process. The expansion and growth of our business could place a significant strain on our management systems, infrastructure and other resources. To manage our growth successfully, we must continue to improve and expand our systems and infrastructure in a timely and efficient manner. Our controls, systems, procedures and resources may not be adequate to support a changing and growing company. If our management fails to respond effectively to changes and growth in our business, including acquisitions, there could be a material adverse effect on our business, financial condition, results of operations and future prospects.

## Our strategic business plan may not produce the intended growth in revenue and operating income.

Our strategies ultimately include making significant investments in sales and marketing programs to achieve revenue growth and margin improvement targets. If we do not achieve the expected benefits from these investments or otherwise fail to execute on our strategic initiatives, we may not achieve the growth improvement we are targeting and our results of operations may be adversely affected. We may also fail to secure the capital necessary to make these investments, which will hinder our growth.

In addition, as part of our strategy for growth, we may make acquisitions and enter into strategic alliances such as joint ventures and joint development agreements. However, we may not be able to identify suitable acquisition candidates, complete acquisitions or integrate acquisitions successfully, and our strategic alliances may not prove to be successful. In this regard, acquisitions involve numerous risks, including difficulties in the integration of the operations, technologies, services and products of the acquired companies and the diversion of management's attention from other business concerns. Although we will endeavor to evaluate the risks inherent in any particular transaction, there can be no assurance that we will properly ascertain all such risks. In addition, acquisitions could result in the incurrence of substantial additional indebtedness and other expenses or in potentially dilutive issuances of equity securities. There can be no assurance that difficulties encountered with acquisitions will not have a material adverse effect on our business, financial condition and results of operations.

#### We currently have no sales, marketing or distribution operations and will need to expand our expertise in these areas.

While we currently have no sales, marketing or distribution operations, we are in the process of building such operations in connection with the commercialization of our PURE EP System, and we will need to expand our expertise in these areas. To increase internal sales, distribution and marketing expertise and be able to conduct these operations, we would have to invest significant amounts of financial and management resources. In developing these functions ourselves, we could face a number of risks, including:

- we may not be able to attract and build an effective marketing or sales force;
- the cost of establishing, training and providing regulatory oversight for a marketing or sales force may be substantial; and
- there are significant legal and regulatory risks in medical device marketing and sales that we have never faced, and any failure to comply with applicable legal and regulatory requirements for sales, marketing and distribution could result in an enforcement action by the U.S. Food and Drug Administration, European regulators or other authorities that could jeopardize our ability to market our planned products or could subject us to substantial liability.

#### The liability of our directors and officers is limited.

The applicable provisions of the Delaware General Corporation Law and our Amended and Restated Certificate of Incorporation and Bylaws limit the liability of our directors to us and our stockholders for monetary damages for breaches of their fiduciary duties, with certain exceptions, and for other specified acts or omissions of such persons. In addition, the applicable provisions of the Delaware General Corporation Law and of our Amended and Restated Certificate of Incorporation and By-laws provide for indemnification of such persons under certain circumstances. In the event we are required to indemnify any of our directors or any other person, our financial strength may be harmed.

## Our product development program depends upon third-party researchers who are outside our control and whose negative performance could materially hinder or delay our pre-clinical testing or clinical trials.

We do not have the ability to conduct all aspects of pre-clinical testing or clinical trials ourselves. We depend upon independent investigators and collaborators, such as commercial third-parties, government, universities and medical institutions, to conduct our pre-clinical and clinical trials under agreements with us. These collaborators are not our employees and we cannot control the amount or timing of resources that they devote to our programs. These investigators may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. The failure of any of these outside collaborators to perform in an acceptable and timely manner in the future, including in accordance with any applicable regulatory requirements, such as good clinical and laboratory practices, or pre-clinical testing or clinical trial protocols, could cause a delay or otherwise adversely affect our pre-clinical testing or clinical trials, our success in obtaining regulatory approvals and, ultimately, the timely advancement of our development programs. In addition, these collaborators may also have relationships with other commercial entities, some of whom may compete with us. If our collaborators assist our competitors at our expense, our competitive position would be harmed.

#### Negative publicity or unfavorable media coverage could damage our reputation and harm our operations.

In the event that the marketplace perceives our products as not offering the benefits which we believe they offer, we may receive negative publicity. This publicity may result in litigation and increased regulation and governmental review. If we were to receive such negative publicity or unfavorable media attention, whether warranted or unwarranted, our ability to market our products would be adversely affected. We may be required to change our products and services and become subject to increased regulatory burdens, and we may be required to pay large judgments or fines and incur significant legal expenses. Any combination of these factors could further increase our cost of doing business and adversely affect our financial position, results of operations and cash flows.

#### We may face risks associated with future litigation and claims.

We may, in the future, be involved in one or more lawsuits, claims or other proceedings. These suits could concern issues including contract disputes, employment actions, employee benefits, taxes, environmental, health and safety, personal injury and product liability matters. Due to the uncertainties of litigation, we can give no assurance that we will prevail on any claims made against us in any such lawsuit. Also, we can give no assurance that any other lawsuits or claims brought in the future will not have an adverse effect on our financial condition, liquidity or operating results.

Specifically, we believe we will be subject to product liability claims or product recalls, particularly in the event of false positive or false negative reports, because we plan to develop and manufacture medical diagnostic products. We intend to obtain appropriate insurance coverage once we reach a manufacturing stage. A product recall or a successful product liability claim or claims that exceed our planned insurance coverage could have a material adverse effect on us. In addition, product liability insurance is expensive. In the future we may not be able to obtain coverage on acceptable terms, if at all. Moreover, our insurance coverage may not adequately protect us from liability that we incur in connection with clinical trials or sales of our products. In the event of an award against us during a time when we have no available insurance or insufficient insurance, we may sustain significant losses of our operating capital. In addition, any products liability litigation, regardless of outcome or strength of claims, may divert time and resources away from the day-to-day operation of our business and product development efforts. Any of these outcomes could adversely impact our business and results of operations, as well as impair our reputation in the medical and investment communities.

We may be subject, directly or indirectly, to U.S. federal and state health care fraud and abuse and false claims laws and regulations. Prosecutions under such laws have increased in recent years and we may become subject to such litigation. If we are unable to, or have not fully complied with such laws, we could face substantial penalties.

While we have achieved regulatory approval to market our PURE EP System, however, our operations will be directly, or indirectly through our customers and health care professionals, subject to various U.S. federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, federal False Claims Act, and federal Foreign Corrupt Practices Act. These laws may impact, among other things, our proposed sales, and marketing and education programs.

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal health care program such as the Medicare and Medicaid programs. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal health care covered business, the statute has been violated. The federal Anti-Kickback Statute is broad and, despite a series of narrow safe harbors, prohibits many arrangements and practices that are lawful in businesses outside of the health care industry. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil and administrative sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal health care programs. An alleged violation of the federal Anti-Kickback Statute may be used as a predicate offense to establish liability pursuant to other federal laws and regulations such as the federal False Claims Act. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for health care items or services reimbursed by any source, not only the Medicare and Medicaid programs.

The federal False Claims Act prohibits persons from knowingly filing, or causing to be filed, a false claim to, or the knowing use of false statements to obtain payment from, the federal government. Suits filed under the federal False Claims Act, known as "qui tam" actions, can be brought by any individual on behalf of the government and such individuals, commonly known as "relators" or "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. The frequency of filing qui tam actions has increased significantly in recent years, causing greater numbers of medical device and health care companies to have to defend a federal False Claim Act action. The federal Patient Protection and Affordable Care Act includes provisions expanding the ability of certain relators to bring actions that would have been previously dismissed under prior law. When an entity is determined to have violated the federal False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim. The Deficit Reduction Act of 2005 encouraged states to enact or modify their state false claims act to be at least as effective as the federal False Claims Act by granting states a portion of any federal Medicaid funds recovered through Medicaid-related actions. Most states have enacted state false claims laws, and many of those states included laws including qui tam provisions.

The federal Patient Protection and Affordable Care Act includes provisions known as the Physician Payments Sunshine Act, which requires manufacturers of drugs, biologics, devices and medical supplies covered under Medicare and Medicaid starting in 2012 to record any transfers of value to physicians and teaching hospitals and to report this data beginning in 2013 to the Centers for Medicare and Medicaid Services for subsequent public disclosure. Manufacturers must also disclose investment interests held by physicians and their family members. Failure to submit the required information may result in civil monetary penalties of up to \$1 million per year for knowing violations and may result in liability under other federal laws or regulations. Similar reporting requirements have also been enacted on the state level in the U.S., and an increasing number of countries worldwide either have adopted or are considering similar laws requiring transparency of interactions with health care professionals. In addition, some states such as Massachusetts and Vermont impose an outright ban on certain gifts to physicians. These laws could affect our promotional activities by limiting the kinds of interactions we could have with hospitals, physicians or other potential purchasers or users of our system. Both the disclosure laws and gift bans will impose administrative, cost and compliance burdens on us.

We are unable to predict whether we could be subject to actions under any of these laws, or the impact of such actions. If we are found to be in violation of any of the laws described above and other applicable state and federal fraud and abuse laws, we may be subject to penalties, including civil and criminal penalties, damages, fines, or an administrative action of suspension or exclusion from government health care reimbursement programs and the curtailment or restructuring of our operations.

In addition, to the extent we commence commercial operations overseas, we will be subject to the federal Foreign Corrupt Practices Act and other countries' anti-corruption/anti-bribery regimes, such as the U.K. Bribery Act. The federal Foreign Corrupt Practices Act prohibits improper payments or offers of payments to foreign governments and their officials for the purpose of obtaining or retaining business. Safeguards we implement to discourage improper payments or offers of payments by our employees, consultants, sales agents or distributors may be ineffective, and violations of the federal Foreign Corrupt Practices Act and similar laws may result in severe criminal or civil sanctions, or other liabilities or proceedings against us, any of which would likely harm our reputation, business, financial condition and results of operations.

We have identified a material weakness in our internal control over financial reporting which, if not remediated, could adversely affect our reputation, business or stock price.

As disclosed in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on February 27, 2018 and amended on March 26, 2018, we have identified a material weakness in our internal control over financial reporting related to the segregation of duties in the initiating and recording of transactions.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis. Management has evaluated, and continues to evaluate, avenues for mitigating our internal controls weaknesses, but mitigating controls to completely mitigate internal control weaknesses have been deemed to be impractical and prohibitively costly, due to the size of our organization. While management expects to continue to use reasonable care in following and seeking improvements to effective internal control processes that have been and continue to be in use by us, we cannot assure you that our remedial measures will be sufficient to address the material weakness. Moreover, we cannot assure you that we will not identify additional material weaknesses in our internal control over financial reporting in the future. If we are unable to remediate the material weakness, our ability to record, process and report financial information accurately, and to prepare financial statements within the time periods specified by the rules and forms of the Securities and Exchange Commission, could be adversely affected. The occurrence of or failure to remediate the material weakness may adversely affect our reputation and business and the market price of our common stock and any other securities we may issue.

### Risks Related to Our Intellectual Property

If we do not obtain protection for our intellectual property rights, our competitors may be able to take advantage of our research and development efforts to develop competing products.

We intend to rely on a combination of patents, trade secrets, and nondisclosure and non-competition agreements to protect our proprietary intellectual property. We have filed two patent applications with the U.S. Patent and Trademark Office, and we have filed one of these patent applications under the Patent Cooperation Treaty (PCT) with the U.S. Receiving Office and plan to also file the other one in the PCT and with the U.S. Receiving Office. We plan to file additional patent applications in the U.S. and in other countries as we deem appropriate for our products. Our applications have and will include claims intended to provide market exclusivity for certain commercial aspects of the products, including the methods of production, the methods of usage and the commercial packaging of the products. However, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- if and when such patents will be issued, and, if granted, whether patents will be challenged and held invalid or unenforceable;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly regardless of outcome.

Our success also depends upon the skills, knowledge and experience of our scientific and technical personnel, our consultants and advisors as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents may be unobtainable or difficult to obtain, we rely on trade secret protection and confidentiality agreements. To this end, it is our policy to require all of our employees, consultants, advisors and contractors to enter into agreements which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. If any of our trade secrets, know-how or other proprietary rights would be significantly impaired and our business and competitive position would suffer.

Given the fact that we may pose a competitive threat, competitors, especially large and well-capitalized companies that own or control patents relating to electrophysiology recording systems, may successfully challenge our current and planned patent applications, produce similar products or products that do not infringe our future patents, or produce products in countries where we have not applied for patent protection or that do not respect our patents.

If any of these events occurs, or we otherwise lose protection for our trade secrets or proprietary know-how, the value of our intellectual property may be greatly reduced. Patent protection and other intellectual property protection are important to the success of our business and prospects, and there is a substantial risk that such protections will prove inadequate.

If we infringe upon the rights of third parties, we could be prevented from selling products and forced to pay damages and defend against litigation.

If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we may be required to:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;
- abandon an infringing product candidate;
- redesign our product candidates or processes to avoid infringement;
- cease usage of the subject matter claimed in the patents held by others;
- pay damages; and/or
- defend litigation or administrative proceedings which may be costly regardless of outcome, and which could result in a substantial diversion of our financial and management resources.

Any of these events could substantially harm our earnings, financial condition and operations.

#### Risks Related to our Common Stock

Although our shares of common stock are now listed on the NASDAQ Capital Market, we currently have a limited trading volume, which results in higher price volatility for, and reduced liquidity of, our common stock.

Although our shares of common stock are now listed on the NASDAQ Capital Market under the symbol "BSGM," trading volume in our common stock has been limited and an active trading market for our shares of common stock may never develop or be maintained. The absence of an active trading market increases price volatility and reduces the liquidity of our common stock. As long as this condition continues, the sale of a significant number of shares of common stock at any particular time could be difficult to achieve at the market prices prevailing immediately before such shares are offered.

If we cannot continue to satisfy the continuing listing criteria of the NASDAQ Capital Market, the exchange may subsequently delist our common stock.

NASDAQ requires us to meet certain financial, public float, bid price and liquidity standards on an ongoing basis in order to continue the listing of our common stock. Generally, we must maintain a minimum amount of stockholders equity and a minimum number of holders of our securities. If we fail to meet any of the continuing listing requirements, our common stock may be subject to delisting. If our common stock is delisted and we are not able to list our common stock on another national securities exchange, we expect our securities would be quoted on an over-the-counter market. If this were to occur, our stockholders could face significant material adverse consequences, including limited availability of market quotations for our common stock and reduced liquidity for the trading of our securities. In addition, we could experience a decreased ability to issue additional securities and obtain additional financing in the future. There can be no assurance that an active trading market for our common stock will develop or be sustained.

The market price for our common stock may fluctuate significantly, which could result in substantial losses by our investors.

The market price of our common stock may fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- the outcomes of potential future patent litigation;
- our ability to monetize our future patents;
- changes in our industry;

- announcements of technological innovations, new products or product enhancements by us or others;
- announcements by us of significant strategic partnerships, out-licensing, in-licensing, joint ventures, acquisitions or capital commitments;
- changes in earnings estimates or recommendations by security analysts, if our common stock is covered by analysts;
- investors' general perception of us;
- future issuances of common stock;
- the addition or departure of key personnel;
- general market conditions, including the volatility of market prices for shares of technology companies, generally, and other factors, including factors unrelated to our operating performance; and
- the other factors described in this "Risk Factors" section.

These factors and any corresponding price fluctuations may materially and adversely affect the market price of our common stock and result in substantial losses by our investors.

Further, the stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations in the past. Continued market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock.

Price volatility of our common stock might be worse if the trading volume of our common stock is low. In the past, following periods of market volatility, stockholders have often instituted securities class action litigation. If we were involved in securities litigation, it could have a substantial cost and divert resources and attention of management from our business, even if we are successful. Future sales of our common stock could also reduce the market price of such stock.

Moreover, the liquidity of our common stock is limited, not only in terms of the number of shares that can be bought and sold at a given price, but by delays in the timing of transactions and reduction in security analysts' and the media's coverage of us, if any. These factors may result in lower prices for our common stock than might otherwise be obtained and could also result in a larger spread between the bid and ask prices for our common stock. In addition, without a large float, our common stock is less liquid than the stock of companies with broader public ownership and, as a result, the trading prices of our common stock may be more volatile. In the absence of an active public trading market, an investor may be unable to liquidate its investment in our common stock. Trading of a relatively small volume of our common stock may have a greater impact on the trading price of our stock than would be the case if our public float were larger. We cannot predict the prices at which our common stock will trade in the future.

Offers or availability for sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

If our stockholders sell substantial amounts of our common stock in the public market, it could create a circumstance commonly referred to as an "overhang," in anticipation of which the market price of our common stock could fall. The existence of an overhang, whether or not sales have occurred or are occurring, also could make more difficult our ability to raise additional financing through the sale of equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

Our stockholders may experience substantial dilution as a result of the conversion of outstanding convertible preferred stock or the exercise of options and warrants to purchase shares of our common stock.

As of September 26, 2018, we have outstanding options to purchase 3,358,130 shares of common stock and have reserved 1,400,694 shares of our common stock for further issuances pursuant to our 2012 Equity Incentive Plan. In addition, as of September 26, 2018, we may be required to issue 169,571 shares of our common stock for issuance upon conversion of outstanding convertible Series C preferred stock which includes accrued dividends as of June 30, 2018; 200,316 shares of our common stock for issuance upon conversion of outstanding convertible Series E preferred stock which includes make-whole payment dividends; and 5,088,506 shares of our common stock for issuance upon exercise of outstanding warrants. Should all of these shares be issued, you would experience dilution in ownership of our common stock and the price of our common stock will decrease unless the value of our company increases by a corresponding amount.

The interests of our controlling stockholders may not coincide with yours and such controlling stockholders may make decisions with which you may disagree.

As of September 26, 2018, three of our stockholders beneficially owned over 28.13% of our common stock. As a result, these stockholders may be able to influence the outcome of matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change in control of our company and make some future transactions more difficult or impossible without the support of our controlling stockholders. The interests of our controlling stockholders may not coincide with our interests or the interests of other stockholders.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. We currently have new research coverage by securities and industry analysts. If one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts cease coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

### We are subject to financial reporting and other requirements that place significant demands on our resources.

We are subject to reporting and other obligations under the Securities Exchange Act of 1934, as amended, including the requirements of Section 404 of the Sarbanes-Oxley Act of 2002. Section 404 requires us to conduct an annual management assessment of the effectiveness of our internal controls over financial reporting. These reporting and other obligations place significant demands on our management, administrative, operational, internal audit and accounting resources. Any failure to maintain effective internal controls could have a material adverse effect on our business, operating results and stock price. Moreover, effective internal control is necessary for us to provide reliable financial reports and prevent fraud. If we cannot provide reliable financial reports or prevent fraud, we may not be able to manage our business as effectively as we would if an effective control environment existed, and our business and reputation with investors may be harmed.

We are an "emerging growth company" and we cannot be certain that the reduced disclosure requirements applicable to emerging growth companies will not make our common stock less attractive to investors.

The JOBS Act permits "emerging growth companies" like us to rely on some of the reduced disclosure requirements that are already available to smaller reporting companies. As long as we qualify as an emerging growth company or a smaller reporting company, we would be permitted to omit the auditor's attestation on internal control over financial reporting that would otherwise be required by the Sarbanes-Oxley Act, as described above, and are also exempt from the requirement to submit "say-on-pay", "say-on-pay frequency" and "say-on-parachute" votes to our stockholders and may avail ourselves of reduced executive compensation disclosure that is already available to smaller reporting companies.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the exemption from complying with new or revised accounting standards provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, as long as we are an emerging growth company. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We intend to take advantage of the benefits of this until we are no longer an emerging growth company or until we affirmatively and irrevocably opt out of this exemption. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards.

We will cease to be an emerging growth company upon the earliest to occur of (i) the last day of the fiscal year during which we had total annual gross revenues of \$1.07 billion; (ii) the last day of the fiscal year following the fifth anniversary of the date of the first sale of common stock under our registration statement on Form S-1 that became effective on June 23, 2014; (iii) the date on which we have, during the previous 3-year period, issued more than \$1 billion in non-convertible debt; or (iv) the date on which we are deemed to be a "large accelerated filer," as defined by the Securities and Exchange Commission, which would generally occur upon our attaining a public float of at least \$700 million. Once we lose emerging growth company status, we expect the costs and demands placed upon our management to increase, as we would have to comply with additional disclosure and accounting requirements, particularly if we would also not qualify as a smaller reporting company. In addition, until such time, we cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile and could cause our stock price to decline.

## Delaware law and our Amended and Restated Certificate of Incorporation and By-laws contain anti-takeover provisions that could delay or discourage takeover attempts that stockholders may consider favorable.

Our board of directors is authorized to issue shares of preferred stock in one or more series and to fix the voting powers, preferences and other rights and limitations of the preferred stock. Accordingly, we may issue shares of preferred stock with a preference over our common stock with respect to dividends or distributions on liquidation or dissolution, or that may otherwise adversely affect the voting or other rights of the holders of common stock. Issuances of preferred stock, depending upon the rights, preferences and designations of the preferred stock, may have the effect of delaying, deterring or preventing a change of control, even if that change of control might benefit our stockholders. In addition, we are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless (i) prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; (ii) the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

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.

## The terms of our Series C Preferred Stock prohibit us from paying dividends in the future on our common stock. As a result, any return on investment may be limited to the value of our common stock.

The terms of our Series C Preferred Stock prohibit us from paying dividends in the future on our common stock, absent consent from the holders representing a super-majority of the outstanding shares of our Series C Preferred Stock and a certain investor. Because we will likely not pay dividends, our common stock may be less valuable because a return on an investment in our common stock will only occur if our stock price appreciates.

#### Risks Related to our Series C Preferred Stock

Our Series C Preferred Stock contains covenants that could limit our financing options and liquidity position, which would limit our ability to grow our business.

Covenants in the certificate of designation for our Series C Preferred Stock impose operating and financial restrictions on us. These restrictions prohibit or limit our ability to, among other things:

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

These restrictions may limit our ability to obtain financing, withstand downturns in our business or take advantage of business opportunities. Moreover, debt financing we may seek may contain terms that include more restrictive covenants, may require repayment on an accelerated schedule or may impose other obligations that limit our ability to grow our business, acquire needed assets, or take other actions we might otherwise consider appropriate or desirable.

In addition, the certificate of designation for our Series C Preferred Stock requires us to redeem shares of our Series C Preferred Stock, at each holder's option and for an amount greater than their stated value, upon the occurrence of certain events, including our being subject to a judgment of greater than \$100,000 or our initiation of bankruptcy proceedings.

The holders of our Series C Preferred Stock are entitled to receive a dividend, which may be increased if we do not comply with certain covenants.

The holders of the Series C Preferred Stock are entitled to a 9% annual dividend on the \$1,000 per share stated value of our Series C Preferred Stock, which is payable in cash or, subject to the satisfaction of certain conditions, in pay-in-kind shares. The dividend may be increased to a 18% annual dividend if we fail to comply with certain covenants, including our being subject to a judgment of greater than \$100,000 or our initiation of bankruptcy proceedings. As a result of the payment of dividends related to our Series C Preferred Stock, we may be obligated to pay significant sums of money or issue a significant number of shares of our common stock, which could negatively affect our operations or result in the dilution of the holders of our common stock, respectively.

Our Series C Preferred Stock and certain of our warrants contain anti-dilution provisions that may result in the reduction of their conversion prices or exercise prices in the future.

Our Series C Preferred Stock and certain of our warrants contain anti-dilution provisions, which provisions require the lowering of the conversion price or exercise price, as applicable, to the purchase price of future offerings. Furthermore, with respect to such warrants, if we complete an offering below the exercise price of such warrants, the number of shares issuable under such warrants will be proportionately increased such that the aggregate exercise price payable after taking into account the decrease in the exercise price, shall be equal to the aggregate exercise price prior to such adjustment. If in the future we issue securities for less than the conversion or exercise price of our Series C Preferred Stock and such warrants, respectively, we will be required to further reduce the relevant conversion or exercise prices, and the number of shares underlying such warrants will be increased. We may find it more difficult to raise additional equity capital while our Series C Preferred Stock and such warrants are outstanding.

#### Risks Related to our Series E Preferred Stock

#### The holders of our Series E Preferred Stock are entitled to receive a dividend.

The holders of the Series E Preferred Stock are entitled to a 7% annual dividend on the \$1,500 per share stated value of our Series E Preferred Stock when such holders convert their shares of Series E Preferred Stock into common stock, which is payable in cash. As a result of the payment of dividends related to our Series E Preferred Stock, we may be obligated to pay significant sums of money which could negatively affect our operations.

Our Series E Preferred Stock and certain of our warrants contain anti-dilution provisions that may result in the reduction of their conversion prices or exercise prices in the future.

Our Series E Preferred Stock contains anti-dilution provisions, which provisions require the lowering of the conversion price to the purchase price of future offerings. If in the future we issue securities for less than the conversion price of our Series E Preferred Stock and such warrants, respectively, we will be required to further reduce the relevant conversion price. We may find it more difficult to raise additional equity capital while our Series E Preferred Stock is outstanding.

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference contain forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus and the documented incorporated by reference, including statements regarding our future financial condition, business strategy and plans, and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "design," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "positioned," "potential," "seek," "should," "target," "will," "would" and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. 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:

- inability to manufacture our PURE EP product 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;
- loss of one or more key executives or scientists; and
- difficulties in securing regulatory approval to market our product candidates.

These risks are not exhaustive. Other sections of this prospectus or the documents incorporated by reference may include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus or to conform these statements to actual results or to changes in our expectations.

You should carefully read this prospectus, together with the information incorporated herein by reference as described under the heading "Incorporation by Reference," and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

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 shares of our common stock. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

#### **USE OF PROCEEDS**

All shares of our common stock offered by this prospectus are being registered for the accounts of the selling stockholders and we will not receive any proceeds from the sale of these shares. However, we will receive proceeds from the exercise price of the warrants if the warrants are exercised for cash. We intend to use those proceeds, if any, for general corporate purposes.

#### SELLING STOCKHOLDERS

Up to 766,008 shares of our common stock are currently being offered by the selling stockholders under this prospectus. This reflects the sum of the number of shares of our common stock (i) 250,000 shares into which the Series E Preferred Stock were exercised, at a price of \$3.75 per share per \$1.500 principal amount of Series E Preferred Stock, (ii) 150,000 shares into which the Series E Preferred Stock are currently exercisable, at a price of \$3.75 per share per \$1,500 principal amount of Series E Preferred Stock (iii) 50,316 issuable upon payment of the make-whole dividend of 7% per annum payable upon conversion of the Series E Preferred Stock, (iv) 42,358 issued upon payment of the make-whole dividend of 7% per annum payable upon conversion of the Series E Preferred Stock (iii) into which the Series E Warrants are exercisable at \$3.75 per share, and (v) into which the Consent Warrants (as defined below) are exercisable at \$3.75 per share. All of the shares of Series E Preferred Stock and the Series E Warrants were purchased by the Series E Holders pursuant to the Securities Purchase Agreement dated as of February 16, 2018 (the "Series E Purchase Agreement"), by and among the Company and the Series E Holders (the "Private Placement"). The Series E Holders paid \$1,500 for a unit consisting of one share of Series E Preferred Stock and a Series E Warrant to purchase up to an aggregate of 200,000 shares of our common stock at an exercise price of \$4.38 per share. On April 30, 2018, the terms of the Series E Warrants automatically adjusted due to the full-ratchet anti-dilution protection provision contained in such warrants. As a result of the adjustment, the exercise price applicable to the Series E Warrants decreased to \$3.75 per share from \$4.38 per share, and the number of shares issuable under each warrant was increased such that the aggregate exercise price payable under such warrant, after taking into account the decrease in the exercise price, is equal to the aggregate exercise price prior to such adjustment. An additional 33,334 shares of common stock may be issued upon exercise of the Series E Warrants due to the adjustment.

In connection with the Private Placement, on February 14, 2018, we entered into a consent agreement (the "Consent") with the holders of our Series D Convertible Preferred Stock (the "Series D Holders"). In consideration for their entry into the Consent, we issued to the Series D Holders warrants to purchase up to an aggregate of 40,000 shares of common stock (the "Consent Warrants"). The Consent Warrants are exercisable immediately and expire on February 14, 2021, and have an exercise price of \$3.75 per share. The Consent Warrants include a "full ratchet" anti-dilution adjustment in the event that we issue any common stock or common stock equivalent at a per share price lower than the applicable exercise price then in effect.

We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time pursuant to this prospectus. The selling stockholders may also sell, transfer or otherwise dispose of all or a portion of their shares in transactions exempt from the registration requirements of the Securities Act of 1933, as amended, or pursuant to another effective registration statement covering those shares. Except for the ownership of the shares of common stock and the warrants issued pursuant to the Series E Purchase Agreement, the Series E Holders have not had any material relationship with us within the past three years. Except for the ownership of the Consent Warrants and the purchase of shares of our Series D Preferred Stock and the Series D Warrants, the Series D Holders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The first column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the Series E Preferred Stock, the Series E Warrants and/or the Consent Warrants, as of September 26, 2018, assuming exercise of all warrants held by the selling stockholder on that date, without regard to any limitations on exercise.

The second column lists the shares of common stock being offered by this prospectus by the selling stockholders and does not take in account any limitations on (i) conversion of the Series E Preferred Stock or issuance of common stock or (ii) exercise of the Series E Warrants or the Consent Warrants.

In accordance with the terms of a registration rights agreement with the Series E Holders (the "Registration Rights Agreement"), this prospectus generally covers the resale of at least the sum of (i) the number of shares of common stock issued upon conversion of the Series E Preferred Stock issued pursuant to the Series E Purchase Agreement as of the trading day immediately preceding the date the registration statement is initially filed with the SEC, (ii) the number of shares of common stock issuable as a make-whole dividend of 7% per annum upon the conversion of our Series E Preferred Stock and (ii) the maximum number of shares of common stock issued and issuable upon exercise of the Series E Warrants as of the trading day immediately preceding the date the registration statement is initially filed with the SEC. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the Series E Preferred Stock, a selling stockholder may not convert the Series E Preferred Stock to the extent such exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding shares of common stock following such exercise. Under the terms of the Series E Warrants and the Consent Warrants, a selling stockholder may not exercise the Series E Warrants or the Consent Warrants to the extent such exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding shares of common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of such warrants which have not been exercised. The number of shares in the second column does not reflect these limitations. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

	Ownership Before Offering		Ownership After Offering	
	Number of shares of common stock beneficially	Number of	Number of shares of common stock beneficially	Percentage of common stock beneficially
Selling Stockholder	owned (1)	shares offered	owned (1)	owned (1)
Cavalry Fund I LP (2)	375,546(3)	375,546(3)	-	*
L1 Capital Global Opportunities Master Fund (4)	350,462(5)	350,462(5)	-	*
Alpha Capital Anstalt (6)	541,958(7)	35,000(7)	506,958(7)	3.00%
Brio Capital Master Fund Ltd (8)	43,967(9)	5,000(9)	38,967(9)	*

<sup>\*</sup> Less than 1%

- (1) In computing the percentage of our common stock beneficially owned by each selling stockholder after the offering, we have assumed the exercise by such selling stockholder of all warrants with respect to those shares being offered by such selling stockholder, and therefore the calculation is based on a number of shares of common stock outstanding comprised of (i) 16,329,755 shares of common stock outstanding as of September 26, 2018 plus (ii) the number of shares offered by the selling stockholder in this offering underlying warrants held by such selling stockholder. The shares offered by one selling stockholder underlying warrants held by such selling stockholder are not deemed outstanding for the purpose of computing the percentage ownership of any other selling stockholder.
- (2) Thomas Walsh has sole voting and dispositive power over the securities held for the account of this selling stockholder.

- (3) Includes (i) 50,000 shares of common stock issued upon conversion of Series E Preferred Stock (ii) 150,000 shares of common stock issuable upon conversion of Series E Preferred Stock, (iii) 8,563 shares of common stock as a make-whole dividend issued upon the conversion of Series E Preferred Stock, (iv) 50,316 shares of common stock as a make-whole dividend issuable upon the conversion of Series E Preferred Stock, and (v) 116,667 shares of common stock issuable upon the exercise of warrants.
- (4) David Feldman has sole voting and dispositive power over the securities held for the account of this selling stockholder.
- (5) Includes (i) 200,000 shares of common stock issued upon conversion of Series E Preferred Stock (ii) 33,795 shares of common stock as a make-whole dividend issued upon the conversion of Series E Preferred Stock, and (iii) 116,667 shares of common stock issuable upon the exercise of warrants.
- (6) Konrad Ackerman has sole voting and dispositive power over the securities held for the account of this selling stockholder.
- (7) Includes shares of common stock issuable upon the exercise of warrants.
- (8) Shaye Hirsch has sole voting and dispositive power over the securities held for the account of this selling stockholder.
- (9) Includes shares of common stock issuable upon the exercise of warrants.

#### PLAN OF DISTRIBUTION

Each selling stockholder (the "Selling Stockholders") of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the NASDAQ Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- 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;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- In transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 under the Securities Act of 1933, as amended, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. In no event shall any broker- dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

We are required to pay certain fees and expenses incurred by us incident to the registration of the securities. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because Selling Stockholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The Selling Stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the Selling Stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for us to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) the date on which all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

#### **DESCRIPTION OF SECURITIES**

#### Common stock

We have authorized 201,000,000 shares of capital stock, par value \$0.001 per share, of which 200,000,000 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, 4,200 are authorized as Series C Preferred Stock 1,400 are authorized as Series D Preferred Stock and 1,000 are authorized as Series E Preferred Stock. On September 26, 2018, there were 16,329,755 shares of common stock issued and outstanding, 475 shares of Series C Preferred Stock issued and outstanding, 375 shares of Series E Preferred Stock, and no shares of Series A Preferred Stock, Series B Preferred Stock or Series D Preferred Stock issued and outstanding.

#### Holders of Capital Stock

As of September 26, 2018, there were approximately 335 holders of our common stock, as determined by counting our record holders and the number of participants reflected in a security position listing provided to us by the Depository Trust Company. Because the "DTC participants" are brokers and other institutions holding shares of our common stock on behalf of their customers, we do not know the actual number of unique shareholders represented by these record holders. As of September 26, 2018, there were: no holders of our Series A Preferred Stock or Series B Preferred Stock; 7 holders of our Series C Preferred Stock; no holders of our Series D Preferred Stock; and 1 holder of our Series E Preferred Stock.

#### 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. 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 \$100,000 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 the 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.

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.

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 Amended and Restated Certificate of Incorporation or our By-laws that would prevent or delay a change in our control.

#### **Preferred Stock**

There are presently no issued and outstanding shares of Series A Preferred Stock, Series B Preferred Stock or Series D Preferred Stock.

#### Series C 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. 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 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) we are subject to a 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%.

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 \$3.75 per share, subject to the beneficial ownership limitation described below. 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 \$3.75 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 capital stock;
- pay cash dividends to our stockholders; and
- engage in transactions with affiliates.

#### Series E Preferred Stock

Each share of our Series E Preferred Stock is entitled to receive cumulative dividends at the rate per share (as a percentage of the stated value per share of Series E Preferred Stock) of 7% per annum, with respect to the Series E Preferred Stock on each date that such holder converts shares of Series E Preferred Stock into common stock (with respect only to shares of Series E Preferred Stock being converted). Upon the conversion of shares of Series E Preferred Stock prior to February 16, 2021, we shall also pay to the holders of the Series E Preferred Stock so converted cash, or at our option, common stock or a combination thereof, with respect to the Series E Preferred Stock so converted in an amount equal to \$210 per \$1,000 of stated value of the Series E Preferred Stock being converted, less the amount of all prior dividends paid on such converted Series E Preferred Stock before the relevant date of conversion.

In the event of our liquidation or winding up of its affairs, the holders of Series E Preferred Stock will be entitled to a liquidation preference of the stated value per share of \$1,500 plus any accrued but unpaid dividends or any other fees due the holder. A total of 1,000 shares were designated as Series E Preferred Stock.

Each share of Series E Preferred Stock may, at any time, be converted into shares of common stock determined by dividing the stated value of the Series E Preferred Stock being converted by the conversion price of \$3.75 per share. The conversion price is subject to "full ratchet" anti-dilution price protection upon the issuance of equity or equity-linked securities at a price lower than the conversion price as well as other customary anti-dilution protection.

#### Warrants

#### October 2013 Five-Year Amendment Warrants

As consideration for amending the terms of the securities purchase agreement to permit our private placement of our common stock and warrants in December 2013, on October 14, 2013, we issued to the holders of our Series C Preferred Stock five-year warrants to purchase up to an aggregate of 133,093 shares of common stock. The terms of these warrants are identical to the Five-Year Warrants described above. As a result of the full-ratchet anti-dilution protection provision of the warrants, the exercise price of the warrants was subsequently decreased from \$6.53 per share to \$3.75 per share and the aggregate number of shares issuable under the warrants was increased to 231,575. As of September 26, 2018, the October 2013 Five-Year Amendment Warrants issued and outstanding are exercisable into 111,335 shares of common stock.

### December 2013 Five-Year Warrants

In connection with the private placement of our common stock in December 2013 and January 2014, we issued to the investors participating in the private placement five-year warrants to purchase up to an aggregate of 71,184 shares of common stock at an exercise price of \$9.18 per share. The warrants contain customary anti-dilution protections. The warrants are exercisable for cash; or if at any time after six months from the issuance date, there is no effective registration statement registering the resale, or no current prospectus available for the resale, of the shares of common stock underlying the warrants, the warrants may be exercised by means of a "cashless exercise". As of September 26, 2018, the December 2013 Five-Year Warrants issued and outstanding are exercisable into 69,551 shares of common stock.

#### April 2014 Five-Year Warrants

In connection with the private placement of our common stock in April 2014, we issued to the investors participating in the private placement five-year warrants to purchase up to an aggregate of 45,952 shares of common stock at an exercise price of \$9.38 per share. The warrants contain customary anti-dilution protections. The warrants are exercisable for cash; or if at any time after six months from the issuance date, there is no effective registration statement registering the resale, or no current prospectus available for the resale, of the shares of common stock underlying the warrants, the warrants may be exercised by means of a "cashless exercise".

#### August 2014 Five-Year Warrants

In connection with the private placement of our common stock in August and September 2014, we issued to the investors participating in the private placement five-year warrants to purchase up to an aggregate of 76,240 shares of common stock at an exercise price of \$6.88 per share. The warrants contain customary anti-dilution protections. The warrants are exercisable for cash; or if at any time after six months from the issuance date, there is no effective registration statement registering the resale, or no current prospectus available for the resale, of the shares of common stock underlying the warrants, the warrants may be exercised by means of a "cashless exercise".

#### December 2014 Warrants

In connection with the private placement of our common stock in December 2014 and January, February and March 2015, we issued to the investors participating in the private placement five-year warrants to purchase up to an aggregate of 320,720 shares of common stock. The warrants are exercisable at \$9.38 per share and expire March 31, 2020. The warrants contain customary anti-dilution protections. The warrants are exercisable for cash; or if at any time after six months from the issuance date, there is no effective registration statement registering the resale, or no current prospectus available for the resale, of the shares of common stock underlying the warrants, the warrants may be exercised by means of a "cashless exercise".

#### October 2015 Three-Year Warrants

In connection with the private placement of our common stock in October, November and December 2015 and February, March and April 2016, we issued to the investors participating in the private placement three-year warrants to purchase up to an aggregate of 600,613 shares of common stock at an exercise price of \$4.88 per share. The warrants contain customary anti-dilution protections and are exercisable for cash. As of September 26, 2018, the October 2015 Three-Year Warrants issued and outstanding are exercisable into 573,945 shares of common stock.

### May 2016 Warrants

In connection with the private placement of our common stock in June 2016, we issued to the investors participating in the private placement three-year warrants to purchase up to an aggregate of 15,430 shares of common stock at an exercise price of \$5.25 per share. The warrants contain customary anti-dilution protections and are exercisable for cash. In February 2017, we exchanged these warrants for warrants to purchase up to an aggregate of 18,001 shares of common stock at an exercise price of \$3.75, with all other terms and conditions the same.

### August 2016 Warrants

In connection with the private placement of our common stock in August and September 2016, we issued to the investors participating in the private placement three-year warrants to purchase up to an aggregate of 75,006 shares of common stock at an exercise price of \$4.88 per share. The warrants contain customary anti-dilution protections and are exercisable for cash.

## October 2016 Warrants

In connection with the private placement of our common stock in October, November and December 2016 and February and March 2017, we issued to the investors participating in the private placement three-year warrants to purchase up to an aggregate of 580,001 shares of common stock at an exercise price of \$3.75 per share. The warrants contain customary anti-dilution protections and are exercisable for cash. As of September 26, 2018, the October 2016 Warrants issued and outstanding are exercisable into 545,000 shares of common stock.

#### April 2017 Warrants

In connection with the private placement of our common stock in April, May, June, July, August, September, October, November and December 2017 and January 2018, we issued to the investors participating in the private placement three-year warrants to purchase up to an aggregate of 601,727 shares of common stock at an exercise price of \$3.75 per share. The warrants contain customary anti-dilution protections and are exercisable for cash.

#### Series D - Class A Warrants and Class B Warrants

On November 3, 2017, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain institutional accredited investors (the "Investors"), pursuant to which we issued Class A Warrants to purchase an aggregate of 266,800 shares of common stock at an exercise price of \$4.38 per share. Contemporaneously with the entry into the Purchase Agreement, we and the Investors agreed to exchange outstanding warrants to purchase 312,203 shares of common stock at an exercise price of \$3.75 per share for new Class B Warrants to purchase an equal number of shares of common stock at the same exercise price. As of September 26, 2018, the Series D – Class B Warrants issued and outstanding are exercisable into 210,168 shares of common stock.

On November 6, 2017, the terms of the Class A Warrants automatically adjusted due to the full-ratchet anti-dilution protection provision contained in such warrants. As a result of the adjustment, the exercise price applicable to the Class A Warrants decreased to \$3.75 per share from \$4.38 per share, and the number of shares issuable under each warrant was increased such that the aggregate exercise price payable under such warrant, after taking into account the decrease in the exercise price, is equal to the aggregate exercise price prior to such adjustment. An additional 44,467 shares of common stock may be issued upon exercise of the Class A Warrants due to the adjustment.

Class A Warrants are exercisable immediately and expire on May 3, 2021. The Class B Warrants are exercisable immediately and expire on November 3, 2020, and have an exercise price of \$3.75. The Class A Warrants and Class B Warrants otherwise have similar terms, including, a "full ratchet" anti-dilution adjustment in the event that we issue any common stock at a per share price lower than the applicable exercise price then in effect, and the ability to be exercised via a cashless exercise.

### Series E Warrants

On February 16, 2018, we entered into a Securities Purchase Agreement with certain institutional accredited investors pursuant to which we issued warrants to purchase an aggregate of 200,000 shares of common stock, par value \$0.001 per share, at an exercise price of \$4.38 per share. The warrants are exercisable immediately and expire on August 16, 2021. The warrants include a "full ratchet" anti-dilution adjustment in the event that we issue any common stock or common stock equivalent at a per share price lower than the applicable exercise price then in effect.

On April 30, 2018, the terms of the warrants automatically adjusted due to the full-ratchet anti-dilution protection provision contained in such warrants. As a result of the adjustment, the exercise price applicable to the such warrants decreased to \$3.75 per share from \$4.38 per share, and the number of shares issuable under each warrant was increased such that the aggregate exercise price payable under such warrant, after taking into account the decrease in the exercise price, is equal to the aggregate exercise price prior to such adjustment. An additional 33,334 shares of common stock may be issued upon exercise of the warrants due to the adjustment.

#### Consent Warrants

On February 14, 2018, in connection with our entry into the purchase agreement mentioned directly above, we entered into a consent with the holders of our Series D Preferred Stock. Pursuant to the consent, the holder of our Series D Preferred Stock consented to the private placement and became entitled at any time on or before April 17, 2018, to elect to receive the more favorable terms of the private placement. In consideration for their entry into the consent, we issued to such holders warrants to purchase 40,000 shares of common stock. The warrants are exercisable immediately and expire on February 14, 2021, and have an exercise price of \$3.75 per share. The warrants include a "full ratchet" anti-dilution adjustment in the event that we issue any common stock or common stock equivalent at a per share price lower than the applicable exercise price then in effect.

#### April 2018 Warrants

In connection with the private placements of our common stock on April 30 and May 11, 2018, we issued to the investors participating in the private placement three-year warrants to purchase up to an aggregate of 666,606 shares of common stock at an exercise price of \$4.38 per share. The warrants contain customary anti-dilution protections and are exercisable for cash.

## July 2018 Warrants

On July 30, 2018, we entered into securities purchase agreements with certain accredited investors, pursuant to which we issued in three closings occurring on July 30, August 16 and August 17, 2018, warrants to purchase up to an aggregate of 354,952 shares of Common Stock. The warrants issued to the investors consisted of (i) nine-month warrants to purchase one quarter of one share of common stock and (ii) three-year warrants to purchase one quarter of one share of common stock. The nine-month are initially exercisable at a price of \$3.75 per share and the three-year are initially exercisable at a price of \$6.85 per share. Each share of common stock was sold together with one nine-month warrant and one three-year at a price of \$5.70 per share of common stock and accompanying warrants.

In connection with the July 2018 Private Placement, the Company issued to the Placement Agent (or its designees) three-year to purchase up to 40,482 shares of common stock.

### Mayo Warrant

In March 2017, we issued to Mayo Clinic Ventures three-year warrants to purchase up to an aggregate of 252,000 shares of common stock at an exercise price of \$3.75 per share in connection with a know-how licensing agreement with Mayo Foundation for Medical Education and Research. The warrants contain customary anti-dilution protections and are exercisable for cash.

#### Series A Placement Agent Warrant

As consideration for serving as our placement agent in connection with the private placement of Series A Preferred Stock, on January 18, 2013, we issued to Laidlaw & Company (UK) Ltd. a seven-year warrant to purchase up to 14,033 shares of common stock at an exercise price of \$4.60 per share. The terms of this warrant are otherwise identical to the Five-Year Warrants described above. As of September 26, 2018, the Series A Placement Agent Warrants issued and outstanding are exercisable into 12,294 shares of common stock.

## Series B Placement Agent Warrant

As consideration for serving as our placement agent in connection with the private placement of Series B Preferred Stock, on January 18, 2013, we issued to Laidlaw & Company (UK) Ltd. a seven-year warrant to purchase up to 12,307 shares of common stock at an exercise price of \$5.05 per share. The terms of this warrant are otherwise identical to the Five-Year Warrants described above. As of September 26, 2018, the Series B Placement Agent Warrants issued and outstanding are exercisable into 12,227 shares of common stock.

#### Par Value Warrant

As consideration for providing general financial advisory services, on January 7, 2013, we issued to Jamess Capital Group LLC a seven-year warrant to purchase up to 153,328 shares of common stock at an exercise price of \$0.0025 per share. The terms of this warrant are otherwise identical to the Five-Year Warrants described above.

#### Common Stock Placement Agent Warrants

As consideration for serving as our placement agent in connection with a private placement of our common stock, on December 31, 2013 and January 31, 2014, we issued to Laidlaw & Company (UK) Ltd. warrants to purchase an aggregate of up to 16,132 shares of common stock. The terms of this warrant are identical to the December 2013 Five-Year Warrants described above.

As consideration for serving as our placement agent in connection with a private placement of our common stock, on April 4 and April 30, 2014, we issued to Laidlaw & Company (UK) Ltd. warrants to purchase an aggregate of up to 9,208 shares of common stock. The terms of this warrant are identical to the April 2014 Five-Year Warrants described above.

As consideration for serving as our placement agent in connection with a private placement of our common stock, on August 15 and September 12, 2014, we issued to Laidlaw & Company (UK) Ltd. warrants to purchase an aggregate of up to 15,264 shares of common stock. The terms of this warrant are identical to the August 2014 Five-Year Warrants described above.

As consideration for serving as our placement agent in connection with a private placement of our common stock, between December 2014 and March 2015, we issued to Laidlaw & Company (UK) Ltd. warrants to purchase an aggregate of up to 160,388 shares of common stock. The terms of this warrant are identical to the December 2014 Warrants described above.

As consideration for serving as our placement agent in connection with a private placement of our common stock, between October 2015 and April 2016, we issued to Laidlaw & Company (UK) Ltd. and certain designated employees of Laidlaw & Company (UK) Ltd., three-year warrants to purchase up to an aggregate of 93,188 shares of common stock at an exercise price of \$3.75 per share. The warrants contain customary anti-dilution protections and are exercisable for cash or may be exercised by means of a "cashless exercise". As of September 26, 2018, the October 2015 Placement Agent Warrants issued and outstanding are exercisable into 88,594 shares of common stock.

As consideration for serving as our placement agent in connection with a private placement of our common stock, between October 2016 and March 2017, we issued to certain designated employees of Laidlaw & Company (UK) Ltd., three-year warrants to purchase up to an aggregate of 74,785 shares of common stock at an exercise price of \$3.75 per share. The warrants contain customary anti-dilution protections and are exercisable for cash or may be exercised by means of a "cashless exercise".

## **Registration Rights**

### 2013 Series C Private Placement

On February 6, 2013, in connection with our private placement of our Series C Preferred Stock and warrants, we entered into a registration rights agreement with the purchasers pursuant to which we agreed to provide certain registration rights with respect to the common stock issuable upon conversion of our Series C Preferred Stock and exercise of the warrants issued to holders of our Series C Preferred Stock. Specifically, we agreed to file a registration statement with the Securities and Exchange Commission covering the resale of the common stock issuable upon conversion of the Series C Preferred Stock and exercise of the warrants on or before July 22, 2013 and to cause such registration statement to be declared effective by the Securities and Exchange Commission, in the event that the registration statement is not reviewed by the Securities and Exchange Commission, within five trading days after we are notified that registration statement is not being reviewed by the Securities and Exchange Commission, and by November 22, 2013 in the event that the registration statement is reviewed by the Securities and Exchange Commission and the Securities and Exchange Commission issues comments.

If (i) the registration statement is not filed by July 22, 2013, (ii) the registration statement is not declared effective by the Securities and Exchange Commission within five trading days after we are notified that registration statement is not being reviewed by the Securities and Exchange Commission, in the case of a no review, (iii) the registration statement is not declared effective by the Securities and Exchange Commission by November 22, 2013 in the case of a review by the Securities and Exchange Commission pursuant to which the Securities and Exchange Commission issues comments or (iv) the registration statement ceases to remain continuously effective for more than 20 consecutive calendar days or more than an aggregate of 45 calendar days during any 12-month period after its first effective date, then we are subject to liquidated damage payments to the holders of the shares sold in the private placement in an amount equal to 0.25% of the aggregate purchase price paid by such purchasers per month of delinquency. Notwithstanding the foregoing, (i) the maximum aggregate liquidated damages due under the registration rights agreement shall be 3% of the aggregate purchase price paid by the purchasers, and (ii) if any partial amount of liquidated damages remains unpaid for more than seven days, we shall pay interest of 18% per annum, accruing daily, on such unpaid amount.

Pursuant to the registration rights agreement, we must maintain the effectiveness of the registration statement from the effective date until the date on which all securities registered under the registration statement have been sold, or are otherwise able to be sold pursuant to Rule 144 without volume or manner-of-sale restrictions, subject to the our right to suspend or defer the use of the registration statement in certain events.

We filed a registration statement on July 22, 2013, which was originally declared effective on June 23, 2014. We filed post-effective amendments to the registration statement on June 30, 2015, May 27, 2016, May 26, 2017, August 3, 2017, August 30, 2017 and June 6, 2018, to satisfy the requirements under the registration rights agreement with the purchasers of our Series C Preferred Stock and warrants. We intend to file additional post-effective amendments to such registration statement as may be required by law, rule or regulation.

#### 2014 Private Placement

On each of December 31, 2013, April 4, 2014, August 15, 2014, and December 19, 2014, in connection with private placements of our common stock and warrants, we entered into registration rights agreements with the purchasers in such private placements pursuant to which we agreed to provide certain registration rights with respect to the common stock issued to the investors participating in such private placements and the common stock issuable upon exercise of the related warrants issued to such investors. Specifically, we agreed to file a registration statement with the Securities and Exchange Commission covering the resale of the shares of common stock issued pursuant to the private placements and issuable upon the exercise of the warrants within 45 days of the termination date of such private placements and to cause such registration statement to be declared effective by the Securities and Exchange Commission, in the event that the registration statement is not reviewed by the Securities and Exchange Commission, within 30 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, and within 180 calendar days of the initial filing date of the registration statement in the event that the registration statement is reviewed by the Securities and Exchange Commission and the Securities and Exchange Commission issues comments.

If (i) the registration statement is not filed within 45 days of the applicable termination date, (ii) the registration statement is not declared effective by the Securities and Exchange Commission within 30 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, in the case of a no review, (iii) the registration statement is not declared effective by the Securities and Exchange Commission within 180 calendar days of the initial filing date of the registration statement in the case of a review by the Securities and Exchange Commission pursuant to which the Securities and Exchange Commission issues comments or (iv) the registration statement ceases to remain continuously effective for more than 10 consecutive calendar days or more than an aggregate of 15 calendar days during any 12-month period after its first effective date, then we are subject to liquidated damage payments to the holders of the shares sold in the private placement in an amount equal to 1.0% of the aggregate purchase price paid by such purchasers per month of delinquency, provided, however, that we will not be required to make any payments if any of the foregoing events occurred at such time that all securities registered or to be registered in the registration statement are eligible for resale pursuant to Rule 144 (without volume restrictions or current public information requirements) promulgated by the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended and provided, further, that we will not be required to make any liquidated damage payments with respect to any securities registered or to be registered in the registration statement that we are unable to register due to limits imposed by the Securities and Exchange Commission's interpretation of Rule 415 under the Securities Act of 1933, as amended. Notwithstanding the foregoing, (i) the maximum aggregate liquidated damages due under the registration rights agreements dated December 31, 2013, April 4, 2014 and August 15, 2014 shall be 3% of the aggregate purchase price paid by the purchasers, (ii) the maximum aggregate liquidated damages due under the registration rights agreement dated December 19, 2014 shall be 6% of the aggregate purchase price paid by the purchasers and (iii) if any partial amount of liquidated damages remains unpaid for more than seven days, we shall pay interest of 18% per annum, accruing daily, on such unpaid amount.

Pursuant to the registration rights agreements, we must maintain the effectiveness of the registration statement from the effective date until the date on which all securities registered under the registration statement have been sold, or are otherwise able to be sold pursuant to Rule 144 without volume or manner-of-sale restrictions and without the requirement to be in compliance with the current public information requirement under Rule 144, subject to the our right to suspend or defer the use of the registration statement in certain events.

We filed a registration statement on May 20, 2015, which was originally declared effective on June 12, 2015. We filed post-effective amendments to the registration statement on June 17, 2016, May 26, 2017, August 3, 2017, August 30, 2017 and June 6, 2018, to satisfy the requirements under the registration rights agreement with the purchasers of our common stock and warrants. We intend to file additional post-effective amendments to such registration statement as may be required by law, rule or regulation.

#### 2015 Private Placement

On October 23, 2015, in connection concurrent and related private placements of our common stock and warrants, we entered into registration rights agreements with the purchasers in such private placements pursuant to which we agreed to provide certain registration rights with respect to the common stock issued to the investors participating in such private placements and the common stock issuable upon exercise of the related warrants issued such investors. Specifically, we agreed to file a registration statement with the Securities and Exchange Commission covering the resale of the shares of common stock issued pursuant to the private placement and issuable upon the exercise of the warrants within 45 days of the final termination date of such private placements and to cause such registration statement to be declared effective by the Securities and Exchange Commission, in the event that the registration statement is not reviewed by the Securities and Exchange Commission, within 10 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, and within 120 calendar days of the initial filing date of the registration statement in the event that the registration statement is reviewed by the Securities and Exchange Commission and the Securities and Exchange Commission issues comments.

If (i) the registration statement is not filed within 45 days of the applicable termination date, (ii) the registration statement is not declared effective by the Securities and Exchange Commission within 10 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, in the case of a no review, (iii) the registration statement is not declared effective by the Securities and Exchange Commission within 120 calendar days of the initial filing date of the registration statement in the case of a review by the Securities and Exchange Commission pursuant to which the Securities and Exchange Commission issues comments or (iv) the registration statement ceases to remain continuously effective for more than 10 consecutive calendar days or more than an aggregate of 15 calendar days during any 12-month period after its first effective date, then we are subject to liquidated damage payments to the holders of the shares sold in the private placement in an amount equal to 1.0% of the aggregate purchase price paid by such purchasers per month of delinquency, provided, however, that we will not be required to make any payments if any of the foregoing events occurred at such time that all securities registered or to be registered in the registration statement are eligible for resale pursuant to Rule 144 (without volume restrictions or current public information requirements) promulgated by the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended and provided, further, that we will not be required to make any liquidated damage payments with respect to any securities registered or to be registered in the registration statement that we are unable to register due to limits imposed by the Securities and Exchange Commission's interpretation of Rule 415 under the Securities Act of 1933, as amended. Notwithstanding the foregoing, (i) the maximum aggregate liquidated damages due under the registration rights agreement dated October 23, 2015 shall be 6% of the aggregate purchase price paid by the purchasers and (ii) if any partial amount of liquidated damages remains unpaid for more than seven days, we shall pay interest of 18% per annum, accruing daily, on such unpaid amount.

Pursuant to the registration rights agreements, we must maintain the effectiveness of the registration statement from the effective date until the first to occur of (i) the date that is one year from the date the registration statement is declared effective by the Securities and Exchange Commission and (ii) the date on which all securities registered under the registration statement have been sold, or are otherwise able to be sold pursuant to Rule 144 without volume or manner-of-sale restrictions and without the requirement to be in compliance with the current public information requirement under Rule 144, subject to the our right to suspend or defer the use of the registration statement in certain events.

We filed a registration statement on August 2, 2016, which was originally declared effective on August 9, 2016. We filed post-effective amendments to the registration statement on May 22, 2017, August 3, 2017, August 30, 2017, and June 6, 2018 to satisfy the requirements under the registration rights agreement with the purchasers of our common stock and warrants. We intend to file additional post-effective amendments to such registration statement as may be required by law, rule or regulation.

#### 2016 Private Placement

On October 28, 2016 in connection concurrent and related private placements of our common stock and warrants, we entered into registration rights agreements with the purchasers in such private placements pursuant to which we agreed to provide certain registration rights with respect to the common stock issued to the investors participating in such private placements and the common stock issuable upon exercise of the related warrants issued to such investors. Specifically, we agreed to file a registration statement with the Securities and Exchange Commission covering the resale of the shares of common stock issued pursuant to the private placement and issuable upon the exercise of the warrants within 45 days of the final termination date of such private placements and to cause such registration statement to be declared effective by the Securities and Exchange Commission, in the event that the registration statement is not reviewed by the Securities and Exchange Commission, within 10 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, and within 120 calendar days of the initial filing date of the registration statement in the event that the registration statement is reviewed by the Securities and Exchange Commission and the Securities and Exchange Commission issues comments.

If (i) the registration statement is not filed within 45 days of the applicable termination date, (ii) the registration statement is not declared effective by the Securities and Exchange Commission within 10 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, in the case of a no review, (iii) the registration statement is not declared effective by the Securities and Exchange Commission within 120 calendar days of the initial filing date of the registration statement in the case of a review by the Securities and Exchange Commission pursuant to which the Securities and Exchange Commission issues comments or (iv) the registration statement ceases to remain continuously effective for more than 10 consecutive calendar days or more than an aggregate of 15 calendar days during any 12-month period after its first effective date, then we are subject to liquidated damage payments to the holders of the shares sold in the private placement in an amount equal to 1.0% of the aggregate purchase price paid by such purchasers per month of delinquency, provided, however, that we will not be required to make any payments if any of the foregoing events occurred at such time that all securities registered or to be registered in the registration statement are eligible for resale pursuant to Rule 144 (without volume restrictions or current public information requirements) promulgated by the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended and provided, further, that we will not be required to make any liquidated damage payments with respect to any securities registered or to be registered in the registration statement that we are unable to register due to limits imposed by the Securities and Exchange Commission's interpretation of Rule 415 under the Securities Act of 1933, as amended. Notwithstanding the foregoing, (i) the maximum aggregate liquidated damages due under the registration rights agreement dated October 28, 2016 shall be 6% of the aggregate purchase price paid by the purchasers and (ii) if any partial amount of liquidated damages remains unpaid for more than seven days, we shall pay interest of 18% per annum, accruing daily, on such unpaid amount.

We filed a registration statement on June 8, 2017, which was originally declared effective on September 21, 2017. We filed a post-effective amendment to the registration statement on June 6, 2018 to satisfy the requirements under the registration rights agreement with the purchasers of our common stock and warrants. We intend to file additional post-effective amendments to such registration statement as may be required by law, rule or regulation.

## 2017 Private Placement

On April 6, 2017, in connection concurrent and related private placements of our common stock and warrants, we entered into registration rights agreements with the purchasers in such private placements pursuant to which we agreed to provide certain registration rights with respect to the common stock issued to the investors participating in such private placements and the common stock issuable upon exercise of the related warrants issued to such investors. Specifically, we agreed to file a registration statement with the Securities and Exchange Commission covering the resale of the shares of common stock issued pursuant to the private placement and issuable upon the exercise of the warrants within 45 days of the final termination date of such private placements and to cause such registration statement to be declared effective by the Securities and Exchange Commission, in the event that the registration statement is not reviewed by the Securities and Exchange Commission, within 10 calendar days after we are notified that the registration statement is not being reviewed by the Securities and Exchange Commission, and within 120 calendar days of the initial filing date of the registration statement in the event that the registration statement is reviewed by the Securities and Exchange Commission issues comments.

If (i) the registration statement is not filed within 45 days of the applicable termination date, (ii) the registration statement is not declared effective by the Securities and Exchange Commission within 10 calendar days after we are notified that registration statement is not being reviewed by the Securities and Exchange Commission, in the case of a no review, (iii) the registration statement is not declared effective by the Securities and Exchange Commission within 120 calendar days of the initial filing date of the registration statement in the case of a review by the Securities and Exchange Commission pursuant to which the Securities and Exchange Commission issues comments or (iv) the registration statement ceases to remain continuously effective for more than 10 consecutive calendar days or more than an aggregate of 15 calendar days during any 12-month period after its first effective date, then we are subject to liquidated damage payments to the holders of the shares sold in the private placement in an amount equal to 1.0% of the aggregate purchase price paid by such purchasers per month of delinquency, provided, however, that we will not be required to make any payments if any of the foregoing events occurred at such time that all securities registered or to be registered in the registration statement are eligible for resale pursuant to Rule 144 (without volume restrictions or current public information requirements) promulgated by the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended and provided, further, that we will not be required to make any liquidated damage payments with respect to any securities registered or to be registered in the registration statement that we are unable to register due to limits imposed by the Securities and Exchange Commission's interpretation of Rule 415 under the Securities Act of 1933, as amended. Notwithstanding the foregoing, (i) the maximum aggregate liquidated damages due under the registration rights agreement dated April 6, 2017 shall be 6% of the aggregate purchase price paid by the purchasers and (ii) if any partial amount of liquidated damages remains unpaid for more than seven days, we shall pay interest of 18% per annum, accruing daily, on such unpaid amount.

We filed a registration statement on February 28, 2018, and Amendment No. 1 to the registration statement on March 22, 2018, which was declared effective on March 26, 2018. We intend to file additional post-effective amendments to such registration statement as may be required by law, rule or regulation.

Pursuant to the registration rights agreements, we must maintain the effectiveness of the registration statement from the effective date until the first to occur of (i) the date that is one year from the date the registration statement is declared effective by the Securities and Exchange Commission and (ii) the date on which all securities registered under the registration statement have been sold, or are otherwise able to be sold pursuant to Rule 144 without volume or manner-of-sale restrictions and without the requirement to be in compliance with the current public information requirement under Rule 144, subject to the our right to suspend or defer the use of the registration statement in certain events.

November 2017 Private Placement - Series D Preferred Stock

On November 3, 2017, in connection with our entry into the Purchase Agreement with the Investors we entered into a registration rights agreement whereby we agreed to file a registration statement with the Securities and Exchange Commission within 45 days of the closing of the transactions contemplated by the Purchase Agreement (the "Filing Date") covering the resale of (a) all shares of common stock issuable upon conversion of the Preferred Shares, (b) all shares of common stock issuable upon exercise of the Class A Warrants and Class B Warrants (the "Warrants"), (c) any additional shares of common stock issuable in connection with any anti-dilution provisions in the Warrants, and (d) any securities issued or then issuable upon any stock split, dividend or other distribution, recapitalization or similar event ("Registrable Securities"), not then registered. The Company will use its reasonable best efforts to cause such registration statement to be declared effective by the SEC (such date, the "Effectiveness Date") within 90 days of the Filing Date.

If (i) the registration statement is not filed on or prior to the Filing Date, (ii) we fail to file with the Securities and Exchange Commission a request for acceleration of a registration statement within 5 calendar days of the date that we are notified by the Securities and Exchange Commission that such registration statement will not be reviewed or will not be subject to further review, (iii) prior to the effective date of a registration statement, we fail to file a pre-effective amendment and otherwise respond in writing to comments made by the Securities and Exchange Commission in respect of such registration statement within 30 days after the receipt of comments by or notice from the Securities and Exchange Commission that such amendment is required in order for such registration statement to be declared effective, (iv) the registration statement is not declared effective by the Effectiveness Date or (v) certain other events described in the registration rights agreement (each, an "Event"), then we shall pay liquidated damages to the Investors in an amount equal to 1% of the aggregate purchase price paid by the Investors on the day of delinquency and each 30th day of delinquency thereafter. Notwithstanding the foregoing, (i) the maximum aggregate liquidated damages due under the registration rights agreement shall be 10% of the aggregate purchase price paid by the Investors.

We filed a registration statement on December 18, 2017, which was originally declared effective on December 29, 2017. We filed a post-effective amendment to the registration statement on January 18, 2018, which was declared effective on January 23, 2018, to update the registration statement. We intend to file additional post-effective amendments to such registration statement as may be required by law, rule or regulation.

February 2018 Private Placement - Series E Preferred Stock

On February 16, 2018, in connection with a private placement of our Series E Preferred Stock and warrants, we entered into a registration rights agreement with the purchasers in such private placement whereby we agreed to file a registration statement with the Securities and Exchange Commission within 90 days of the closing of the private placement covering the resale of (a) all shares of common stock issuable upon conversion of the Series E Preferred Stock issued in the private placement, (b) all shares of common stock issuable upon exercise of the warrants issued in the private placement, (c) all other shares of common stock issued pursuant to any transaction documents which have been, or which may, from time to time be issued or become issuable to the purchasers in the private placement (without regard to any limitation or restriction on purchases), and (d) any securities issued or then issuable upon any stock split, dividend or other distribution, recapitalization or similar event (collectively, the "Registrable Securities"), not then registered. We agreed to use our reasonable best efforts to keep the registration statement effective pursuant to Rule 415 under the Securities Act of 1933, as amended, until the earlier of (i) the date on which the purchasers in the private placement shall have sold all the December Registrable Securities covered thereby and (ii) that date that all Registrable Securities may be sold pursuant to Rule 144 without any public information requirement or volume or manner of sale limitations.

We filed a registration statement on May 16, 2018 which has not yet been declared effective.

#### Delaware Anti-Takeover Law and Provisions of our Amended and Restated Certificate of Incorporation and By-laws

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 Amended and Restated Certificate of Incorporation and By-laws 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 Amended and Restated Certificate of Incorporation and By-laws 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 Amended and Restated Certificate of Incorporation and By-laws:

- 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.

#### Listing

Our common stock is listed on Nasdaq under the trading symbol "BSGM."

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Action Stock Transfer Corp.

#### **LEGAL MATTERS**

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

## **EXPERTS**

Our financial statements as of December 31, 2017 and 2016 and for the years then ended incorporated in this prospectus by reference to the Annual Report on Form 10-K have been audited by Liggett & Webb, P.A., an independent registered public accounting firm, as stated in its report appearing in the registration statement, and are so incorporated in reliance upon the report of such firm given upon its authority as experts in accounting and auditing.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the Securities and Exchange Commission a registration statement, together with any amendments and related exhibits, under the Securities Act of 1933, as amended, with respect to our shares of common stock offered by this prospectus. The registration statement contains additional information about us and our shares of common stock that the selling stockholders are offering in this prospectus.

We are required to file annual, quarterly and current reports and other information with the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended. Our Securities and Exchange Commission filings are available to the public over the Internet at the Securities and Exchange Commission's website at http://www.sec.gov. You may also read and copy any document we file at the Securities and Exchange Commission's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on the public reference rooms and their copy charges. Access to those electronic filings is available as soon as practicable after filing with the Securities and Exchange Commission. You may also request a copy of those filings, excluding exhibits, from us at no cost. Any such request should be addressed to us at: 12424 Wilshire Blvd Suite 745 Los Angeles, CA 90025, Attention: Kenneth L. Londoner, Chief Executive Officer. The registration statement and the documents referred to below under "Incorporation of Certain Information By Reference" are also available on our website, www.biosigtech.com.

We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

#### 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 (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K) 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:

- Our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on February 27, 2018, as amended on March 26, 2018;
- Our Quarterly Reports on Form 10-Q, filed with the SEC on May 4, 2018 and July 27, 2018;
- Our Current Reports on Form 8-K filed with the SEC on January 5, 2018, February 16, 2018, April 4, 2018, May 1, 2018, May 10, 2018, July 30, 2018, August 16, 2018, August 23, 2018, August 24, 2018, September 10, 2018, and September 21, 2018; and
- The description of the Company's common stock and warrants contained in the Form 8-A filed with the SEC on September 17, 2018, including any amendments thereto or reports filed for the purposes of updating this description;

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the common stock made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You may request, orally or in writing, a copy of these filings, which will be provided to you at no cost, by writing or calling us at: 12424 Wilshire Blvd Suite 745 Los Angeles, CA 90025. (512) 329-2643. Information about us is also available at our website at www.biosigtech.com. However, the information in our website is not a part of this prospectus and is not incorporated by reference into this prospectus.

To the extent that any statements contained in a document incorporated by reference are modified or superseded by any statements contained in this prospectus, such statements shall not be deemed incorporated in this prospectus except as so modified or superseded.

# DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

The Amended and Restated Certificate of Incorporation of the Company provides that the liability of the directors of the Company to the Company or its stockholders for monetary damages for acts or omissions occurring in their capacity as directors shall be limited to the fullest extent permitted by the laws of the State of Delaware and any other applicable law. In addition, we have adopted provisions in our Bylaws and entered into indemnification agreements that require the Company to indemnify its directors, officers, and certain other representatives of the Company against expenses and certain other liabilities arising out of their conduct on behalf of the Company to the maximum extent and under all circumstances permitted by law.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Company pursuant to the foregoing provisions, the Company has been informed that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

#### **PART II**

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the various costs and expenses payable by us in connection with the sale of the securities being registered. All such costs and expenses shall be borne by us. Except for the Commission registration fee, all the amounts shown are estimates.

	Amount to be Paid
Commission registration fee	\$ 453.06*
Legal fees and expenses	15,000.00
Accounting fees and expenses	3,500.00
Printing and miscellaneous expenses	None
Total	\$ 18,953.06

<sup>\*</sup> Previously paid

#### Item 15. 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 16. Exhibits and Financial Statement Schedules.

Exhibit No.	Description
3.1	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)
3.2	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)
3.3	Certificate of Second Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc.
3.4	(incorporated by reference to Exhibit 3.3 to the Form S-1 filed on July 22, 2013)  Certificate of Third Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc.
3.5	(incorporated by reference to Exhibit 3.5 to the Form S-1/A filed on January 21, 2014)  Certificate of Fourth Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc.
3.6	(incorporated by reference to Exhibit 3.6 to the Form S-1/A filed on March 28, 2014)  Certificate of Fifth Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc.
3.7	(incorporated by reference to Exhibit 3.1 to the Form 8-K filed on August 21, 2014)  Certificate of Sixth Amendment to the Amended and Restated Certificate of Incorporation of BioSig Technologies, Inc.
3.8	(incorporated by reference to Exhibit 3.1 to the Form 8-K filed on November 25, 2016)  Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Form 8-K filed on November 9, 2017)
3.9 3.10	Bylaws of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.4 to the Form S-1 filed on July 22, 2013) Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock (incorporated by
3.11	reference to Exhibit 3.1 to the Form 8-K filed on February 16, 2018)  Certificate of Seventh Amendment to the Amended and Restated Certification of Incorporation of BioSig Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Form 8-K filed on September 10, 2018)
5.1	Opinion of Haynes and Boone, LLP (filed herewith)
10.1	BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Form S-1 filed on July 22, 2013)
10.2	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)
10.3	Securities Purchase Agreement, dated September 19, 2011, by and between BioSig Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.3 to the Form S-1 filed on July 22, 2013)
10.4	Securities Purchase Agreement, dated December 27, 2011, by and between BioSig Technologies, Inc. and certain
10.5	purchasers set forth therein (incorporated by reference to Exhibit 10.4 to the Form S-1 filed on July 22, 2013)  Securities Purchase Agreement, dated February 6, 2013, by and between BioSig Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.5 to the Form S-1 filed on July 22, 2013)
10.6	Registration Rights Agreement, dated February 6, 2013, by and between BioSig Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.6 to the Form S-1 filed on July 22, 2013)
10.7	Form of Warrant used in connection with February 6, 2013 private placement (incorporated by reference to Exhibit 10.7 to the Form S-1 filed on July 22, 2013)
10.8	Amendment Agreement No. 1 to Securities Purchase Agreement and Registration Rights Agreement, dated February 25, 2013, by and between BioSig Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.8 to the Form S-1 filed on July 22, 2013)

10.9	Amendment Agreement No. 2 to Securities Purchase Agreement, dated April 12, 2013, by and between BioSig
	Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.9 to the Form S-1 filed
	<u>on July 22, 2013)</u>
10.10	Amendment Agreement No. 3 to Securities Purchase Agreement and Registration Rights Agreement, dated June 25, 2013,
	by and between BioSig Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit
	10.10 to the Form S-1 filed on July 22, 2013)
10.11	Office Lease Agreement, dated August 9, 2011, by and between BioSig Technologies, Inc. and Douglas Emmett 1993,
	LLC (incorporated by reference to Exhibit 10.11 to the Form S-1 filed on July 22, 2013)
10.12	Employment Agreement, dated March 1, 2013, by and between BioSig Technologies, Inc. and Kenneth Londoner
	(incorporated by reference to Exhibit 10.12 to the Form S-1 filed on July 22, 2013)
10.13	Indemnity Agreement, dated May 2, 2013 by and between BioSig Technologies, Inc. and Seth H. Z. Fischer (incorporated
	by reference to Exhibit 10.14 to the Form S-1 filed on July 22, 2013)
10.14	Consulting Agreement, dated August 1, 2012, by and between BioSig Technologies, Inc. and Asher Holzer (incorporated
	by reference to Exhibit 10.15 to the Form S-1 filed on July 22, 2013)
10.15	Unsecured Promissory Note made by BioSig Technologies, Inc. in favor of Kenneth Londoner, dated November 21, 2012
	(incorporated by reference to Exhibit 10.19 to the Form S-1/A filed on September 11, 2013)
10.16	Form of 8% Senior Convertible Promissory Note issued pursuant to Bridge Loan Agreement, dated July 20, 2012
	(incorporated by reference to Exhibit 10.20 to the Form S-1/A filed on September 11, 2013)
10.17	Promissory Note made by BioSig Technologies, Inc. in favor of Kenneth Londoner, dated December 6, 2012 (incorporated
	by reference to Exhibit 10.21 to the Form S-1/A filed on September 11, 2013)
10.18	Amendment Agreement No. 4 to Securities Purchase Agreement, dated October 14, 2013, by and between BioSig
	Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.23 to the Form S-1/A
	filed on January 21, 2014)
10.19	Securities Purchase Agreement, dated December 31, 2013, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.24 to the Form S-1/A filed on January 21, 2014)
10.20	Registration Rights Agreement, dated December 31, 2013, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.25 to the Form S-1/A filed on January 21, 2014)
10.21	Form of Warrant used in connection with December 31, 2013 private placement (incorporated by reference to Exhibit
	<u>10.26 to the Form S-1/A filed on January 21, 2014)</u>
10.22	Amendment No. 1 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit
	<u>10.27 to the Form S-1/A filed on March 28, 2014)</u>
10.23	Amendment Agreement No. 5 to Securities Purchase Agreement, dated March 24, 2014, by and between BioSig
	Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to Exhibit 10.28 to the Form S-1/A
	<u>filed on March 28, 2014)</u>
10.24	Patent Assignment, dated March 17, 2014, by and among Budimir Drakulic, Thomas Foxall, Sina Fakhar and Branislav
	Vlajinic and BioSig Technologies, Inc. (incorporated by reference to Exhibit 10.29 to the Form S-1/A filed on May 1,
	<u>2014)</u>
10.25	Securities Purchase Agreement, dated April 4, 2014, by and between BioSig Technologies, Inc. and certain purchasers set
	forth therein (incorporated by reference to Exhibit 10.30 to the Form S-1/A filed on May 1, 2014)
10.26	Registration Rights Agreement, dated April 4, 2014, by and between BioSig Technologies, Inc. and certain purchasers set
	forth therein (incorporated by reference to Exhibit 10.31 to the Form S-1/A filed on May 1, 2014)
10.27	Form of Warrant used in connection with April 4, 2014 private placement (incorporated by reference to Exhibit 10.32 to
	the Form S-1/A filed on May 1, 2014)
10.28	Consulting Agreement, dated December 10, 2010, by and between BioSig Technologies, Inc. and Jonathan Steinhouse
	(incorporated by reference to Exhibit 10.33 to the Form S-1/A filed on May 22, 2014)
10.29	Executive Employment Agreement, dated July 15, 2014, by and between BioSig Technologies, Inc. and Gregory Cash
	(incorporated by reference to Exhibit 10.1 to the Form 8-K filed on July 21, 2014)
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10.30	Incentive Stock Option Agreement, dated July 15, 2014, by and between BioSig Technologies, Inc. and Gregory Cash
10.21	(incorporated by reference to Exhibit 10.2 to the Form 8-K filed on July 21, 2014)
10.31	Securities Purchase Agreement, dated as of August 15, 2014, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on August 21, 2014)
10.32	Registration Rights Agreement, dated as of August 15, 2014, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.3 to the Form 8-K filed on August 21, 2014)
10.33	Form of Warrant used in connection with August 15, 2014 private placement (incorporated by reference to Exhibit 10.2 to
	the Form 8-K filed on August 21, 2014)
10.34	Letter Agreement and Release, dated as of September 1, 2014, by and between BioSig Technologies, Inc. and Asher
	Holzer, Ph.D (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on September 5, 2014)
10.35	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)
10.36	Settlement and Mutual Release Agreement, dated November 3, 2014, by and between BioSig Technologies, Inc. and David
	<u>Drachman (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on November 5, 2014)</u>
10.37	Composite of Unit Purchase Agreement, dated December 19, 2014, as amended by Supplement No. 1, dated December 17,
	2014, by and between BioSig Technologies, Inc. and certain purchasers set forth therein (incorporated by reference to
	Exhibit 10.37 to the Form 10-K filed on February 20, 2015)
10.38	Registration Rights Agreement, dated December 19, 2014, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.38 to the Form 10-K filed on February 20, 2015)
10.39	Form of "A" Warrant used in connection with December 19, 2014 private placement (incorporated by reference to Exhibit
	10.39 to the Form 10-K filed on February 20, 2015)
10.40	Form of "B" Warrant used in connection with December 19, 2014 private placement (incorporated by reference to Exhibit
	10.40 to the Form 10-K filed on February 20, 2015)
10.41	Amendment No. 2 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 99.3
	to the Form S-8 filed on April 17, 2015)
10.42	Amendment No. 3 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit
	10.41 to the Form S-1 filed on May 20, 2015)
10.43	Securities Purchase Agreement, dated as of May 11, 2015, by and between BioSig Technologies, Inc. and Alpha Capital
	Anstalt (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on May 15, 2015)
10.44	Securities Purchase Agreement, dated as of May 11, 2015, by and between BioSig Technologies, Inc. and Brio Capital
	Master Fund Ltd. (incorporated by reference to Exhibit 10.2 to the Form 8-K filed on May 15, 2015)
10.45	Amendment Agreement No. 6 to Securities Purchase Agreement, dated July 30, 2014, by and between BioSig
	Technologies, Inc. and certain purchasers (incorporated by reference to Exhibit 10.44 to the Form S-1/A filed on June 10,
	2015)
10.46	Amendment No. 4 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 99.1
	to the Form 8-K filed on May 29, 2015)
10.47	Form of Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on October 29, 2015)
10.48	Unit Purchase Agreement, dated October 23, 2015, by and between BioSig Technologies, Inc. and certain purchasers set
	forth therein (incorporated by reference to Exhibit 10.2 to the Form 8-K filed on October 29, 2015)
10.49	Form of Warrant used in connection with October 23, 2015 private placement (incorporated by reference to Exhibit 10.3 to
	the Form 8-K filed on Form 8-K on October 29, 2015)
10.50	Registration Rights Agreement, dated October 23, 2015, by and between BioSig Technologies, Inc. and certain purchasers
	set forth therein (incorporated by reference to Exhibit 10.4 to the Form 8-K filed on October 29, 2015)
10.51	Amendment No. 5 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.1)
	to the Form 8-K filed on November 25, 2016)
10.52	General Release and Severance Agreement, dated May 31, 2017, by and between BioSig Technologies, Inc. and Greg Cash
	(incorporated by reference to Exhibit 10.1 to the Form 8-K filed on June 2, 2017)

10.53	Restricted Stock Award Agreement, dated May 31, 2017, by and between BioSig Technologies, Inc. and Greg Cash
	(incorporated by reference to Exhibit 10.2 to the Form 8-K filed on June 2, 2017)
10.54	Form of Unit Purchase Agreement, dated April 6, 2017, by and between BioSig Technologies, Inc. and certain purchasers
	set forth therein (incorporated by reference to Exhibit 10.61 to the Form S-1/A filed on August 3, 2017)
10.55	Form of Warrant used in connection with April 6, 2017 private placement (incorporated by reference to Exhibit 10.62 to
	the Form S-1/A filed on August 3, 2017)
10.56	Form of Registration Rights Agreement, dated April 6, 2017, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.63 to the Form S-1/A filed on August 3, 2017)
10.57	Form of Securities Purchase Agreement, dated November 3, 2017, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on November 9, 2017)
10.58	Form of Class A Common Stock Purchase Warrant used in connection with November 3, 2017 private placement
	(incorporated by reference to Exhibit 10.2 to the Form 8-K filed on November 9, 2017)
10.59	Form of Class B Common Stock Purchase Warrant used in connection with November 3, 2017 private placement
	(incorporated by reference to Exhibit 10.3 to the Form 8-K filed on November 9, 2017)
10.60	Form of Registration Rights Agreement, dated November 3, 2017, by and between BioSig Technologies, Inc. and certain
	purchasers set forth therein used in connection with November 3, 2017 private placement (incorporated by reference to
	Exhibit 10.4 to the Form 8-K filed on November 9, 2017)
10.61	Form of Securities Purchase Agreement dated February 16, 2018, by and between BioSig Technologies, Inc. and certain
10.60	accredited investors (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on February 16, 2018)
10.62	Form of Warrant used in connection with February 16, 2018 sale of Series E Convertible Preferred Stock (incorporated by
10.62	reference to Exhibit 10.2 to the Form 8-K filed on February 16, 2018)
10.63	Form of Registration Rights Agreement dated February 16, 2018, by and between BioSig Technologies, Inc. and certain
	purchasers of Series E Convertible Preferred Stock (incorporated by reference to Exhibit 10.3 to the Form 8-K filed on
10.64	February 16, 2018)
10.64	Form of Consent in connection with February 16, 2018 private placement (incorporated by reference to Exhibit 10.4 to the
10.65	Form 8-K filed on February 16, 2018)  Form of Unit Purchase A green and detail April 20, 2018, by and between BioSig Technologies. Inc. and contain according
10.65	Form of Unit Purchase Agreement dated April 30, 2018, by and between BioSig Technologies, Inc. and certain accredited investors (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on May 1, 2018)
10.66	Form of Warrant used in connection with the April 30, 2018 private placement (incorporated by reference to Exhibit 10.2
10.00	to the Form 8-K filed on May 1, 2018)
10.67	Amendment No. 3 to the BioSig Technologies, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.1)
10.07	to the Form 8-K filed on July 30, 2018)
10.68	Securities Purchase Agreement dated as of July 30, 2018, by and between BioSig Technologies, Inc. and certain purchasers
10.00	set forth therein (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on August 16, 2018)
10.69	Form of Series A Common Stock Purchase Warrant in connection with the July 30, 2018 private placement (incorporated
	by reference to Exhibit 10.2 to the Form 8-K filed on August 16, 2018)
10.70	Form of Series B Common Stock Purchase Warrant in connection with the July 30, 2018 private placement (incorporated
	by reference to Exhibit 10.3 to the Form 8-K filed on August 16, 2018)
23.1	Consent of Liggett & Webb, P.A. (filed herewith)
23.2	Consent of Haynes and Boone, LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)
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#### Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (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 20 percent 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;
- (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.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
  - (i) If the registrant is relying on Rule 430B:
- (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement immediately prior to such effective date; or
- (ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) 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.
- (7) 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-3 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 the 28th day of September, 2018.

# BIOSIG TECHNOLOGIES, INC.

By: /s/ Kenneth L. Londoner

Name: Kenneth L. Londoner

Title: Chairman and Chief Executive Officer

# POWER OF ATTORNEY

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.

Signature	Title	Date
s/ Kenneth L. Londoner Kenneth L. Londoner	Chairman, Chief Executive Officer and Director (principal executive officer)	September 28, 2018
s/ Steve Chaussy teve Chaussy	Chief Financial Officer (principal financial and accounting officer)	September 28, 2018
* Donald E. Foley	Director	September 28, 2018
* Roy T. Tanaka	Director	September 28, 2018
* atrick J. Gallagher	Director	September 28, 2018
eth H. Z. Fischer	Director	September 28, 2018
* effrey F. O'Donnell, Sr.	Director	September 28, 2018
* ndrew L. Filler	Director	September 28, 2018
* varid Weild IV	Director	September 28, 2018

\* By: /s/ KENNETH L. LONDONER

Kenneth L. Londoner Chief Executive Officer Attorney-in-Fact BioSig Technologies, Inc. 12424 Wilshire Boulevard, Suite 745 Los Angeles, California 90025

Re: BioSig Technologies, Inc. – Registration Statement on Form S-3

#### Ladies and Gentlemen:

We have acted as counsel to BioSig Technologies, Inc., a Delaware corporation (the "Company"), in connection with the proposed registration of 766,008 shares of common stock of the Company, par value \$0.001 per share (the "Common Stock"), comprised of (i) up to 400,000 shares of Common Stock (the "Shares") issued or issuable upon the conversion of 1,000 shares of the Company's Series E Convertible Preferred Stock (the "Series E Stock"), (ii) up to 92,674 shares of Common Stock issued or issuable as a make-whole dividend upon conversion of the Series E Stock (the "Dividend Shares" and together with the Shares the "Conversion Shares") and (iii) up to 273,334 shares of Common Stock (the "Warrant Shares") issuable upon the exercise of warrants (the "Warrants"), pursuant to the registration statement on Form S-3 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), initially filed with the Securities and Exchange Commission (the "Commission") on Form S-1 on May 16, 2018 and amended by Amendment No.1 to Form S-1 on Form S-3, filed with the Commission on September 28, 2018.

The opinions expressed herein are limited exclusively to the General Corporation Law of the State of Delaware (the "<u>DGCL</u>") and applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the DGCL and such provisions of the Delaware Constitution and we have not considered, and express no opinion on, any other laws of the laws of any other jurisdiction.

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, including the prospectus, and all exhibits thereto; (ii) the Company's Certificate of Incorporation and any amendments to date certified by the Secretary of State of the State of Delaware; (iii) the Company's By-laws and any amendments to date certified by the Executive Chairman of the Company; (iv) the minutes and records of the corporate proceedings of the Company with respect to the authorization of the issuance of the Conversion Shares and the Warrant Shares covered by the Registration Statement and related matters thereto; (v) the Warrants; (vi) a specimen of the Company's Common Stock certificate; and (vii) such other records, documents and instruments as we have deemed necessary for the expression of the opinions stated herein.

In making the foregoing examinations, we have assumed the genuineness of all signatures (other than those of the Company), the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies thereof and the authenticity of the originals of such latter documents. As to all questions of fact material to these opinions, where such facts have not been independently established, we have relied, to the extent we have deemed reasonably appropriate, upon representations or certificates of officers of the Company or governmental officials.

BioSig Technologies, Inc. September 28, 2018 Page 2

Based upon the foregoing and subject to the assumptions and qualifications stated herein, we are of the opinion that:

The Conversion Shares have been duly authorized for issuance by all necessary corporate action of the Company and, when issued and paid for in accordance with the terms and conditions of the Series E Stock, the Conversion Shares will be validly issued, fully paid and non-assessable.

The Warrant Shares have been duly authorized for issuance by all necessary corporate action of the Company and, when issued in accordance with the terms and conditions of the Warrants, the Warrant Shares will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus constituting part of such Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ Haynes and Boone, LLP

Haynes and Boone, LLP

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Amendment No. 1 to Form S-1 on Form S-3 of our report dated February 27, 2018, relating to the financial statements of BioSig Technologies, Inc. (the "Company"), appearing in the Annual Report on Form 10-K of the Company for the year ended December 31, 2017, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Liggett & Webb, P.A.

New York, New York September 28, 2018