

PROSPECTUS SUPPLEMENT
(To the Prospectus Dated January 12, 2021)



Up to \$30,000,000
Common Stock

We have entered into an At-The-Market Issuance Sales Agreement, or the sales agreement, with Ascendant Capital Markets, LLC, or Ascendant, relating to shares of our common stock, par value \$0.001 per share, offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$30,000,000 from time to time through or to Ascendant, acting as our agent or principal.

Our common stock is listed on The Nasdaq Capital Market under the symbol "BSGM." On September 14, 2023, the last reported sale price of our common stock as reported on The Nasdaq Capital Market was \$0.4291 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus will be made in sales deemed to be "at the market offerings" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. Ascendant is not required to sell any specific amount of securities, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Ascendant and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to Ascendant for sales of common stock sold pursuant to the sales agreement will be an amount equal to 3.0% of the gross proceeds of any shares of common stock sold under the sales agreement. In connection with the sale of the common stock on our behalf, Ascendant will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Ascendant will be deemed to be underwriting commissions or discounts. We have also agreed to expense certain expenses incurred by Ascendant and provide indemnification and contribution to Ascendant with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act. See "Plan of Distribution" on page S-10 of this prospectus supplement for additional information concerning Ascendant's compensation.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page S-4 of this prospectus supplement and page 6 of the accompanying prospectus, and in our Annual Report on Form 10-K and our other reports filed with the Securities and Exchange Commission, which are incorporated into this prospect supplement and the accompanying prospectus by reference, for a discussion of information that should be considered in connection with an investment in our common stock.

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



The date of this prospectus supplement is September 15, 2023

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No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus supplement or the accompanying prospectus. You must not rely on any unauthorized information or representations. This prospectus supplement and the accompanying prospectus are an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement and the accompanying prospectus is current only as of their respective dates.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 (File No. 333-251859) that we filed with the U.S. Securities and Exchange Commission utilizing a “shelf” registration process. This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein. The second part, the accompanying prospectus, provides more general information. References in this prospectus supplement to the “accompanying prospectus” are to the accompanying prospectus. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in the accompanying prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained in this prospectus supplement or the accompanying prospectus, or incorporated by reference herein. We have not, and Ascendant has not, authorized any other person to provide you with different information. The information contained in this prospectus supplement or the accompanying prospectus, or incorporated by reference herein or therein is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our common stock. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference herein and therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” in this prospectus supplement and in the accompanying prospectus, respectively.

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

All references in this prospectus supplement and the accompanying prospectus to “BioSig,” the “Company,” “we,” “us,” “our,” or similar terms refer to BioSig Technologies, Inc. and its subsidiaries taken as a whole, except where the context otherwise requires or as otherwise indicated.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents incorporated by reference herein and therein. This summary is not complete and does not contain all the information you should consider before investing in our securities pursuant to this prospectus supplement and the accompanying prospectus. Before making an investment decision, to fully understand this offering and its consequences to you, you should carefully read this entire prospectus supplement and the accompanying prospectus, including “Risk Factors,” the financial statements, and related notes, and the other information incorporated by reference herein and therein.

Overview

We are a medical technology company focused on deciphering the body’s electrical signals, starting with heart rhythms. Our platform technology aims to address some of healthcare’s biggest challenges—saving time, saving costs, and saving lives.

The Company’s first product, the PURE EP™ Platform, an FDA 510(k) cleared non-invasive class II device, provides superior, real-time signal visualization allowing physicians to perform highly targeted cardiac ablation procedures with increased procedural efficiency and efficacy.

The PURE EP™ Platform serves physicians by enabling the real-time acquisition of raw cardiac signal data—absent of unnecessary noise or interference inherent in traditional approaches. By leveraging a first-of-its-kind combination of hardware and software, the PURE EP™ Platform is designed to deliver unprecedented intracardiac signal purity that pushes the boundaries of cardiac arrhythmia identification, diagnosis, and treatment.

ViralClear Pharmaceuticals, Inc.

ViralClear Pharmaceuticals, Inc. (“ViralClear”) is a majority-owned subsidiary of the Company. As of June 30, 2023, the Company had a majority interest in ViralClear of 69.08%.

Currently, ViralClear is an early-stage medical device company that is developing N-SENSE™, a novel sensing technology platform for high-speed electroencephalogram (EEG) recordings. The specifications for this new product were based on the core competencies of the PURE EP™ signal processing technology, such as broad dynamic range of recorded signals and low signal-to-noise ratio and adapted to address disorders of the autonomic nervous systems through recordings and analysis of action potentials, the impulses along the membrane of a muscle cell or a nerve cell. These impulses are considered to carry valuable clinical information but may be difficult to detect through conventional recording platforms.

BioSig AI Sciences, Inc.

On July 2, 2020, we formed an additional subsidiary, NeuroClear Technologies, Inc., a Delaware corporation, which was renamed to BioSig AI Sciences, Inc. (“BioSig AI”) on May 31, 2023, to pursue clinical needs of cardiac and neurological disorders through recordings and analyses of action potential. On June 30, 2023, we had a majority interest in BioSig AI of 87.5% and as of September 14, 2023, 84.5%. BioSig AI intends to join BioSig’s technology team with external partners and collaborators to advance the research and development of an artificial intelligence (“AI”) medical device platform.

During the period from June 2023 through July 2023, BioSig AI completed two private placement transactions where BioSig AI sold shares to certain institutional and accredited investors, consisting of an aggregate of 2,205,000 shares of its common stock, at purchase price of \$1.00 for aggregate consideration of approximately \$2.1 million.

In addition, pursuant to certain compensation provisions in an engagement agreement, dated June 13, 2023, as amended on July 19, 2023, BioSig AI had entered into with Laidlaw & Company (UK) Ltd. (“Laidlaw”), BioSig AI issued to Laidlaw warrants to purchase an aggregate of 130,500 shares of its common stock in connection with the transactions noted above. The warrants are exercisable for five years from the date of issuance at an exercise price of \$1.00 per share.

Recent Private Placements

During the period from July 2023 through September 2023, we completed two private placement transactions (the “Private Placements”) where we sold shares and warrants to certain accredited investors. On July 31, 2023, we sold to an investor an aggregate of 1,467,624 shares of our common stock and warrants to purchase up to 733,812 shares of common stock, at a purchase price of \$1.02206 per share and a warrant. The warrants have an exercise price of \$0.95956 per share, will become exercisable six months after the date of issuance and will expire five and one-half years following the date of issuance. The gross proceeds from this offering were \$1,499,999.79. On September 12, 2023, we sold to certain investors an aggregate of 990,954 shares of our common stock and warrants to purchase up to 495,477 shares of common stock, at a purchase price of \$0.55502 per share and a warrant. The warrants have an exercise price of \$0.49252 per share, will become exercisable six months after the date of issuance and will expire five and one-half years following the date of issuance. The gross proceeds from this offering were \$549,999.29.

In addition, pursuant to certain compensation provisions in an engagement agreement, dated July 26, 2023, we entered into with Laidlaw, we issued to Laidlaw warrants to purchase an aggregate of 177,637 shares of our common stock in connection with the transactions noted above. The Laidlaw warrants become exercisable six months after the date of issuance and will expire five and one-half years following the date of issuance.

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. Our principal executive offices are located at 55 Greens Farms Road, 1st Floor, Westport, Connecticut 06880, and our telephone number is (203) 409-5444. Our website address is www.biosig.com. Information accessed through our website is not incorporated into this prospectus supplement and is not a part of this prospectus supplement.

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$30,000,000.
Common stock to be outstanding immediately after this offering (1)	143,371,148 shares (as more fully described in the notes following this table), assuming sales of 69,913,773 shares of our common stock in this offering at an offering price of \$0.4291 per share, which was the last reported sale price of our common stock on The Nasdaq Capital Market on September 14, 2023. The actual number of shares issued will vary depending on the sales price under this offering.
Plan of Distribution	“At the market offering” that may be made from time to time through or to Ascendant, as sales agent or principal. See “Plan of Distribution” on page S-10.
Use of Proceeds	We intend to use the net proceeds from this offering (i) for the continuation of commercialization activities related to the PURE EP™ Platform, including additional support for organizational development; (ii) to fund working capital; and (iii) for general corporate purposes and other capital expenditures. See “Use of Proceeds” on page S-8 of this prospectus supplement.
Risk Factors	Investing in our common stock involves a high degree of risk. You should read the “Risk Factors” section beginning on page S-4 of this prospectus supplement and page 6 of the accompanying prospectus and in the documents incorporated by reference in this prospectus supplement for a discussion of factors to consider before deciding to invest in our common stock.
The Nasdaq Capital Market symbol	“BSGM”

(1) The number of shares of common stock to be outstanding immediately after this offering is based on 73,457,375 shares of our common stock outstanding as of June 30, 2023, and excludes as of such date:

- 10,172,823 shares of common stock issuable upon the exercise of warrants outstanding with an exercise price ranging from \$0.4066 to \$6.16 per share and having a weighted average exercise price of \$1.3115 per share;
- 5,309,651 shares of common stock issuable upon the exercise of options outstanding with exercise prices ranging from \$0.40 to \$10.49 and having a weighted average exercise price of \$2.9012 per share;
- 771,099 shares of common stock reserved for future issuance under our 2023 Long-Term Incentive Plan (the “2023 Plan”);
- 580,000 shares of common stock issuable from time to time after this offering upon the settlement of restricted stock units outstanding; and
- 509,231 shares of common stock issuable upon conversion of outstanding Series C Preferred Stock at the conversion price of \$0.25 per share and the stated value per share of \$1,000 (which includes the payment of dividends accrued on the Series C Preferred Stock in an aggregate of 89,231 shares of common stock as of June 30, 2023 at a conversion rate of \$1.09).

In addition, the discussion above does not include (i) the sale and issuance of shares and warrants in the Private Placements, (ii) the sale and issuance of 218,810 shares of common stock at an average offering price of \$0.5463 per share between August 29, 2023 and September 6, 2023 in an at the market offering pursuant to that certain Controlled Equity OfferingSM Sales Agreement, dated August 18, 2023, we entered into with Cantor Fitzgerald & Co. as agent, which has been terminated effective as of September 15, 2023, and (iii) an aggregate of 1,550,000 shares of common stock issued to certain service providers in August 2023 in consideration of their business development services, subsequent to June 30, 2023.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks described below, together with other information in this prospectus supplement, the accompanying prospectus, the information and documents incorporated by reference. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent annual report on Form 10-K and the subsequent quarterly reports on Form 10-Q and other reports that we file with the Securities and Exchange Commission which are on file with the Securities and Exchange Commission and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the Securities and Exchange Commission in the future. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. Please also read carefully the section below entitled “Special Note Regarding Forward-Looking Statements.”

Risks Related to this Offering and our Common Stock

Our stock price is and may continue to be volatile and you may not be able to resell our common stock at or above the price you paid.

The market price for our common stock is volatile and may fluctuate significantly in response to a number of factors, many of which we cannot control, such as quarterly fluctuations in financial results, the timing and our ability to advance the development of our product candidates or changes in securities analysts’ recommendations could cause the price of our stock to fluctuate substantially. Each of these factors, among others, could harm your investment in our common stock and could result in your being unable to resell the shares of our common stock that you purchase at a price equal to or above the price you paid.

In addition, the stock markets in general, and the markets for biotechnology stocks in particular, have experienced extreme volatility that has at times been unrelated to the operating performance of the issuer. Between September 15, 2022 and September 15, 2023, the closing sales price of our common stock reported on the Nasdaq Capital Market has ranged between \$1.55 and \$0.2883 per share. These broad market fluctuations may adversely affect the trading price or liquidity of our common stock. In the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer. If any of our stockholders were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our management would be diverted from the operation of our business.

Our failure to meet the continued listing requirements of Nasdaq could result in a delisting of our common stock, which could negatively impact the market price and liquidity of our common stock and our ability to access the capital markets.

Our common stock is listed on The Nasdaq Capital Market. If we fail to satisfy the continued listing requirements of Nasdaq, such as minimum bid price requirements and minimum stockholders’ equity, Nasdaq may take steps to delist our common stock. In the event of a delisting, we would attempt to take actions to restore our compliance with Nasdaq’s listing requirements, but we can provide no assurance that any such action taken by us would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with Nasdaq’s listing requirements.

On September 6, 2023, we received a letter from the Listing Qualifications Department of Nasdaq indicating that, based upon the closing bid price of our common stock for the 30 consecutive business days between July 25, 2023, to September 5, 2023, we did not meet the minimum bid price of \$1.00 per share required for continued listing on The Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(a)(2). The letter also indicated that we will be provided with a compliance period of 180 calendar days, or until March 4, 2024 (the “Compliance Period”), in which to regain compliance pursuant to Nasdaq Listing Rule 5810(c)(3)(A).

In order to regain compliance with Nasdaq’s minimum bid price requirement, our common stock must maintain a minimum closing bid price of \$1.00 for at least ten consecutive business days during the Compliance Period. In the event we do not regain compliance by the end of the Compliance Period, we may be eligible for additional time to regain compliance. To qualify, we will be required to meet the continued listing requirement for the market value of our publicly held shares and all other initial listing standards for The Nasdaq Capital Market, with the exception of the bid price requirement, and will need to provide written notice of our intention to cure the deficiency during the second compliance period, by effecting a reverse stock split if necessary. If we meet these requirements, we may be granted an additional 180 calendar days to regain compliance. However, if it appears to Nasdaq that we will be unable to cure the deficiency, or if we are not otherwise eligible for the additional cure period, Nasdaq will provide notice that our common stock will be subject to delisting.

Delisting of our common stock would have a negative effect on the price of our common stock, impair the ability to sell or purchase our common stock when persons wish to do so, and any delisting materially adversely affect our ability to raise capital or pursue strategic restructuring, refinancing or other transactions on acceptable terms, or at all. Delisting from the Nasdaq Capital Market could also have other negative results, including the potential loss of institutional investor interest and fewer business development opportunities.

Resales of our common stock in the public market during this offering by our shareholders may cause the market price of our common stock to fall.

We may issue shares of our common stock from time to time in connection with this offering. The issuance from time to time of these new shares of common stock, or our ability to issue new shares of common stock in this offering, could result in resales of our common stock by our current stockholders concerned about the potential dilution of their holdings. In turn, these resales could have the effect of depressing the market price for our common stock.

The common stock offered under this prospectus supplement and the accompanying prospectus may be sold in at the market offerings, and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares under this prospectus supplement and the accompanying prospectus at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience declines in the value of their shares as a result of share sales made at prices lower than the prices they paid.

The actual number of shares we will issue under the sales agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a sales notice to Ascendant at any time throughout the term of the sales agreement. The number of shares that are sold by Ascendant after delivering a sales notice will fluctuate based on the market price of shares of our common stock during the sales period and limits we set with Ascendant. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will ultimately be issued.

You may experience immediate and substantial dilution in the book value per share of the common stock you purchase.

The price per share of our common stock being offered may be higher than the current book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, your interest will be diluted to the extent of the difference between the price per share you pay and the net tangible book value per common share. Assuming that the sale of an aggregate amount of \$30,000,000 of our common stock in this offering at an assumed offering price of \$0.4291 per share, which was the last reported sale price of our common stock on The Nasdaq Capital Market on September 14, 2023, and based on our net tangible book value as of June 30, 2023, if you purchase common stock in this offering you will suffer substantial and immediate dilution of \$0.2302 per share in the net tangible book value of the common stock. The future exercise of outstanding options and warrants will result in further dilution of your investment. See the section entitled "Dilution" below for a more detailed discussion of the dilution you will incur if you purchase shares of our common stock in this offering.

You may experience significant dilution as a result of future financings and the exercise of outstanding options or warrants.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock, including offerings pursuant to the accompanying prospectus. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

We will have broad discretion in the use of the net proceeds from this offering and may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

Our management will have broad discretion in the use of the net proceeds, including for any of the purposes described in the section entitled “Use of Proceeds,” and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure of our management to use these funds effectively could have a material adverse effect on our business and cause the market price of our common stock to decline. Pending their ultimate use, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments. These investments may not yield a favorable return to our stockholders.

If we sell additional equity or debt securities to fund our operations, it may impose restrictions on our business.

In order to raise additional funds to support our operations, we may sell additional equity or debt securities, which may impose restrictive covenants that adversely impact our business. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we are unable to expand our operations or otherwise capitalize on our business opportunities due to such restrictions, our business, financial condition and results of operations could be materially adversely affected.

Our financial statements have been prepared on a going concern basis; we must raise additional capital to fund our operations in order to continue as a going concern.

In its report dated March 31, 2023, Marcum LLP, our independent registered public accounting firm, expressed substantial doubt about our ability to continue as a going concern as we have suffered recurring losses from operations and have insufficient liquidity to fund our future operations. If we are unable to improve our liquidity position, we may not be able to continue as a going concern. The consolidated financial statements included in our Annual Report on Form 10-K did not include any adjustments that might result if we are unable to continue as a going concern and, therefore, be required to realize our assets and discharge our liabilities other than in the normal course of business which could cause investors to suffer the loss of all or a substantial portion of their investment. As of December 31, 2022 and June 30, 2023, respectively, we had approximately \$0.4 million and \$1.3 million of cash and cash equivalents. In order to have sufficient cash and cash equivalents to fund our operations in the future, we will need to raise additional equity or debt capital and cannot provide any assurance that we will be successful in doing so.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

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

- our history of recurring losses and negative cash flows from operating activities and the uncertainty regarding the adequacy of our liquidity to pursue or complete our business objectives, and substantial doubt regarding our ability to continue as a going concern;
- the results of ongoing and future clinical studies;
- our inability to successfully develop or commercialize our product candidates;
- market acceptance of existing and new products;
- our inability to carry out research, development and commercialization plans;
- delays in any phase of the preclinical or clinical development of a product, including during its research and development;
- our inability to complete preclinical testing and clinical trials as anticipated;
- changes in our relationship with key collaborators;
- our ability to adequately protect and enforce rights to intellectual property;
- our need to raise additional capital to meet our business requirements in the future and the difficulties in obtaining financing on commercially reasonable terms, or at all;
- intense competition in our industry, with competitors having substantially greater financial, technological, research and development, regulatory and clinical, manufacturing, marketing and sales, distribution and personnel resources than we do;
- our inability to manufacture our PURE EP product on a commercial scale on our own or in collaborations with third parties;
- entry of new competitors and products and potential technological obsolescence of our products;
- effect of healthcare legislation or reform measures that may substantially change the market for medical care or healthcare coverage in the U.S.;
- the ongoing effects of COVID-19 endemic;
- our failure to obtain regulatory approvals;
- adverse market and economic conditions;
- our ability to regain and maintain the listing of our common stock on the Nasdaq Capital Market;
- loss of one or more key executives;
- difficulties in securing and retaining regulatory approval to market our product and product candidates; and
- depth of the trading market in our common stock.

You should review carefully the section entitled “Risk Factors” beginning on page S-4 of this prospectus supplement for a discussion of these and other risks that relate to our business and investing in our securities. The forward-looking statements contained or incorporated by reference in this prospectus supplement are expressly qualified in their entirety by this cautionary statement. Except as required by applicable law, we do not undertake any obligation to publicly update any forward-looking statement contained in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events. For all forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

DIVIDEND POLICY

We have never paid cash dividends on our common stock and do not anticipate paying any cash dividends in the foreseeable future but intend to retain our capital resources for reinvestment in our business. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant. Our ability to pay dividends is presently restricted pursuant to the terms of our Series C Preferred Stock.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$30,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total offering amount, commissions and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will sell any shares under, or fully utilize, the sales agreement with Ascendant as a source of financing.

We intend to use the net proceeds from this offering (i) for the continuation of commercialization activities related to the PURE EP™ Platform, including additional support for organizational development; (ii) to fund working capital; and (iii) for general corporate purposes and other capital expenditures. We do not currently have more specific plans or commitments with respect to the net proceeds from this offering and, accordingly, are unable to quantify the allocation of such proceeds among the various potential issues.

Investors will be relying on the judgment of our management, who will have broad discretion regarding the application of the proceeds of this offering. The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of cash generated by our operations, the amount of competition and other operational factors. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.

From time to time, we evaluate these and other factors and we anticipate continuing to make such evaluations to determine if the existing allocation of resources, including the proceeds of this offering, is being optimized. Circumstances that may give rise to a change in the use of proceeds include:

- a change in development plan or strategy;
- the addition of new products or applications;
- technical delays;
- delays or difficulties with our clinical trials;
- manufacturing delays;
- negative results from our clinical trials;
- difficulty obtaining regulatory approvals;
- failure to achieve sales as anticipated; and
- the availability of other sources of cash including cash flow from operations and new bank debt financing arrangements, if any.

Pending other uses, we intend to invest the proceeds to us in short-term, investment grade, interest-bearing bank accounts or securities. We cannot predict whether the proceeds invested will yield a favorable, or any, return.

DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the price per share you pay in this offering and the as adjusted net tangible book value per share of our common stock after this offering. Our net tangible book value (deficit) as of June 30, 2023, was approximately \$(526,676), or \$(0.0072) per share of common stock. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of June 30, 2023.

After giving effect to the assumed sale of shares of common stock in the aggregate amount of \$30,000,000 at an assumed offering price of \$0.4291 per share, the last reported sale price of our common stock on The Nasdaq Capital Market on September 14, 2023, and after deducting the placement agent fees and estimated offering expenses payable by us, our net tangible book value as of June 30, 2023, would have been approximately \$28,513,324, or approximately \$0.1989 per share of common stock. This represents an immediate increase in as adjusted net tangible book value of \$0.2061 per share to our existing stockholders, and an immediate dilution of \$0.2302 per share to new investors purchasing our common stock in this offering at the assumed offering price.

The following table illustrates this per share dilution.

Assumed offering price per share	\$	0.4291
Net tangible book value per share as of June 30, 2023	\$	(0.0072)
Increase in net tangible book value per share attributable to the offering	\$	<u>0.2061</u>
As adjusted net tangible book value per share as of June 30, 2023 after giving effect to the offering	\$	<u>0.1989</u>
Dilution in net tangible book value per share to new investors in the offering	\$	<u>0.2302</u>

The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of common stock are sold pursuant to this prospectus supplement. The as adjusted information assumes that all of our shares of common stock in the aggregate amount of \$30,000,000 is sold at the assumed offering price of \$0.4291 per share, the last reported sale price of our common stock on The Nasdaq Capital Market on September 14, 2023. The shares sold in this offering, if any, will be sold from time to time at various prices.

The discussion and table above are based on 73,457,375 shares of common stock outstanding as of June 30, 2023, and excludes the following potentially dilutive securities as of that date:

- 10,172,823 shares of common stock issuable upon the exercise of warrants outstanding with an exercise price ranging from \$0.4066 to \$6.16 per share and having a weighted average exercise price of \$1.3115 per share;
- 5,309,651 shares of common stock issuable upon the exercise of options outstanding with exercise prices ranging from \$0.40 to \$10.49 and having a weighted average exercise price of \$2.9012 per share;
- 771,099 shares of common stock reserved for future issuance under our 2023 Plan;
- 580,000 shares of common stock issuable from time to time after this offering upon the settlement of restricted stock units outstanding;
- 509,231 shares of common stock issuable upon conversion of outstanding Series C Preferred Stock at the conversion price of \$0.25 per share and the stated value per share of \$1,000 (which includes the payment of dividends accrued on the Series C Preferred Stock in an aggregate of 89,231 shares of common stock as of June 30, 2023 at a conversion rate of \$1.09).

To the extent that outstanding exercisable options or warrants are exercised, you may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital by issuing equity or convertible debt securities, your ownership will be further diluted.

In addition, the discussion and table above does not include (i) the sale and issuance of shares and warrants in the Private Placements, (ii) the sale and issuance of 218,810 shares of common stock at an average offering price of \$0.5463 per share between August 29, 2023 and September 6, 2023 in an at the market offering pursuant to that certain Controlled Equity OfferingSM Sales Agreement, dated August 18, 2023, we entered into with Cantor Fitzgerald & Co. as agent, which has been terminated effective as of September 15, 2023, and (iii) an aggregate of 1,550,000 shares of common stock issued to certain service providers in August 2023 in consideration of their business development services, subsequent to June 30, 2023.

PLAN OF DISTRIBUTION

We have entered into an At-The-Market Issuance Sales Agreement with Ascendiant Capital Markets, LLC, as Sales Agent, under which we may issue and sell over a period of time, and from time to time, shares of our common stock having an aggregate offering price of up to \$30,000,000 through the Sales Agent acting as sales agent or directly to the Sales Agent acting as principal. This prospectus supplement relates to our ability to issue and sell over a period of time, and from time to time, shares of our common stock to or through the Sales Agent pursuant to the Sales Agreement. Sales of the shares to which this prospectus supplement and the accompanying prospectus relate, if any, may be made in transactions that are deemed to be “at-the-market” offerings as defined in Rule 415 under the Securities Act, including sales made directly on or through The Nasdaq Capital Market (“Nasdaq”), the trading market for our common stock, or any other trading market in the United States for our common stock, sales made to or through a market maker other than on an exchange, directly to the Sales Agent as principal for its account in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, in privately negotiated transactions, in block trades, or through a combination of any such methods of sale. To the extent required by Regulation M, the Sales Agent acting as our sales agent will not engage in any transactions that stabilize our common stock while the offering is ongoing under this prospectus supplement.

Upon written instructions from us, the Sales Agent will offer the shares of our common stock, subject to the terms and conditions of the Sales Agreement, on a daily basis or as otherwise agreed upon by us and the Sales Agent. We will designate the maximum amount of shares of our common stock to be sold through the Sales Agent on a daily basis or otherwise determine such maximum amount together with the Sales Agent, subject to certain limitations set forth by the SEC. Subject to the terms and conditions of the Sales Agreement, the Sales Agent will use commercially reasonable efforts to sell on our behalf all of the shares of our common stock so designated or determined. We may instruct the Sales Agent not to sell shares of our common stock if the sales cannot be effected at or above the price designated by us in any such instruction. The Sales Agent may also sell our common stock in negotiated transactions with our prior approval. We or the Sales Agent may suspend the offering of shares of our common stock being made under the Sales Agreement upon proper notice to the other party.

For their services as sales agent in connection with the sale of shares of our common stock that may be offered hereby, we will pay the Sales Agent an aggregate fee of 3.0% of the gross sales price per share for any shares sold through it acting as our sales agent. The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such shares. We have agreed to reimburse the Sales Agent for certain of its expenses in an amount not to exceed \$30,000 and, thereafter, reasonable fees and expenses of the Sales Agent’s counsel incurred in conjunction with performing legal services related to the Sales Agreement.

The Sales Agent will provide written confirmation to us no later than the opening of the trading day immediately following the day in which shares of common stock are sold by it on our behalf under the Sales Agreement. Each confirmation will include the number of shares sold on that day, the compensation payable by us to the Sales Agent and the proceeds to us net of such compensation.

Settlement for sales of our common stock will occur, unless the parties agree otherwise, on the second business day following the date on which any sales were made in return for payment of the proceeds to us net of compensation paid by us to the Sales Agent. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Unless otherwise required, we will report at least quarterly the number of shares of common stock sold through the Sales Agent under the Sales Agreement, the net proceeds to us and the compensation paid by us to the Sales Agent in connection with the sales of common stock.

In connection with the sale of common stock on our behalf, the Sales Agent will be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation paid to it will be deemed to be underwriting commissions or discounts. We have agreed, under the Sales Agreement, to provide indemnification and contribution to the Sales Agent against certain civil liabilities, including liabilities under the Securities Act.

In the ordinary course of its business, the Sales Agent and/or its affiliates may perform investment banking, broker-dealer, financial advisory or other services for us for which it may receive separate fees.

We estimate that the total expenses from this offering payable by us, excluding compensation payable to the Sales Agent under the Sales Agreement, will be approximately \$55,000. Additionally, pursuant to the terms of the Sales Agreement, we agreed to reimburse the Sales Agent for the reasonable fees and expenses of its legal counsel incurred in connection with quarterly and annual bring-downs required under the Sales Agreement in an amount not to exceed \$2,500 in the aggregate for each such bring-down.

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The offering of common stock pursuant to the Sales Agreement will terminate upon the earlier of (1) the sale of shares of our common stock with an aggregate offering price of \$30,000,000 subject to the Sales Agreement, (2) September 15, 2025 and (3) the termination of the Sales Agreement, pursuant to its terms, by either the Sales Agent or us.

The Company and the Sales Agent may in the future agree to add one or more additional sales agents to the offering, in which case the Company will file a further prospectus supplement providing the name of such additional sales agents and any other required information.

LEGAL MATTERS

Haynes and Boone, LLP, New York, New York will pass upon certain legal matters relating to the issuance and sales of the securities offered hereby on behalf of BioSig Technologies, Inc. Ascendant is being represented in connection with this offering by Clyde Snow & Sessions, P.C., Salt Lake City, Utah.

EXPERTS

Our financial statements as of December 31, 2022 and for the year then ended incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K have been audited by Marcum LLP, an independent registered public accounting firm, as stated in its report appearing in the registration statement, including the explanatory paragraph regarding our ability to continue as a going concern, and are so incorporated in reliance upon the report of such firm given upon its authority as experts in accounting and auditing.

Our financial statements as of December 31, 2021 and for the year then ended incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K have been audited by Friedman LLP, an independent registered public accounting firm, as stated in its report appearing in the registration statement, including the explanatory paragraph regarding our ability to continue as a going concern, and are so incorporated in reliance upon the report of such firm given upon its authority as experts in accounting and auditing.

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 incorporated by reference is deemed to be part of this prospectus supplement and the accompanying prospectus, and subsequent information that we file with the Securities and Exchange Commission will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus supplement and accompanying prospectus to the extent that a statement contained in this prospectus supplement or the accompanying prospectus modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the Securities and Exchange Commission under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act in this prospectus supplement, between the date of this prospectus supplement and the termination of the offering of the securities described in this prospectus supplement. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed “filed” with the Securities and Exchange Commission, including our Compensation Committee report and performance graph or any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

This prospectus supplement and the accompanying prospectus incorporate by reference the documents set forth below that have previously been filed with the Securities and Exchange Commission:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the Securities and Exchange Commission on [March 31, 2023](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023 filed with the SEC on [May 15, 2023](#) and [August 14, 2023](#), respectively;
- our Current Reports on Form 8-K filed with the Securities and Exchange Commission on [January 17, 2023](#), [January 17, 2023](#), [January 24, 2023](#), [January 26, 2023](#), [February 7, 2023](#) (as amended on Form 8-K/A on [February 7, 2023](#)), [February 8, 2023](#), [February 9, 2023](#), [February 13, 2023](#), [February 22, 2023](#), [March 16, 2023](#), [March 29, 2023](#), [April 21, 2023](#), [May 22, 2023](#), [June 30, 2023](#), [July 21, 2023](#), [July 31, 2023](#), [August 18, 2023](#), [September 5, 2023](#), [September 12, 2023](#), and [September 12, 2023](#); and
- the description of the Company’s common stock and warrants contained in the Form 8-A filed with the Securities and Exchange Commission on [September 17, 2018](#), as amended by [Exhibit 4.1](#) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, including any amendments thereto or reports filed for the purposes of updating this description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including, but excluding any information furnished to, rather than filed with, the Securities and Exchange Commission, will also be incorporated by reference into this prospectus supplement and the accompanying prospectus and deemed to be part of this prospectus supplement and the accompanying prospectus from the date of the filing of such reports and documents.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of this prospectus supplement or the date of the documents incorporated by reference in this prospectus supplement.

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You may request a free copy of any of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus (other than exhibits, unless they are specifically incorporated by reference in the documents) by writing or telephoning us at the following address:

BioSig Technologies, Inc.
Attn: Chief Executive Officer
55 Greens Farms Road, 1st Floor
Westport, Connecticut 06880
(203) 409-5444

You may also access the documents incorporated by reference in this prospectus through our website at www.biosig.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act, and in accordance therewith file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission. The Securities and Exchange Commission maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Securities and Exchange Commission. The address of the Securities and Exchange Commission's website is www.sec.gov.

We make available free of charge on or through our website at www.biosig.com, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with or otherwise furnish it to the Securities and Exchange Commission.

We have filed with the Securities and Exchange Commission a registration statement under the Securities Act, relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement for free at www.sec.gov. The registration statement and the documents referred to below under "Incorporation of Certain Information By Reference" are also available on our website, www.biosig.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.

Prospectus



**\$75,000,000
Common Stock
Preferred Stock
Warrants
Units**

We may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, any combination of the securities described in this prospectus, up to an aggregate amount of \$75,000,000.

We will provide specific terms of any offering in a supplement to this prospectus. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers, and agents; or directly to purchasers. The names of any underwriters, dealers, or agents involved in the sale of our securities, their compensation and any over-allotment options held by them will be described in the applicable prospectus supplement. See "Plan of Distribution."

Our common stock is listed on The Nasdaq Capital Market under the symbol "BSGM." On December 30, 2020, the last reported sale price of our common stock was \$4.13 per share as reported on The Nasdaq Capital Market. We recommend that you obtain current market quotations for our common stock prior to making an investment decision. We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock on any securities exchange.

You should carefully read this prospectus, any prospectus supplement relating to any specific offering of securities, and all information incorporated by reference herein and therein.

Investing in our securities involves a high degree of risk. These risks are discussed in this prospectus under "Risk Factors" beginning on page 6 and in the documents incorporated by reference in this prospectus.

Neither the Securities and Exchange Commission (the "SEC") 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 January 12, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC using a “shelf” registration process. Under this shelf process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings up to a total amount of \$75,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add to, update or change information contained in the prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement.

The prospectus supplement to be attached to the front of this prospectus may describe, as applicable: the terms of the securities offered; the public offering price; the price paid for the securities; net proceeds; and the other specific terms related to the offering of the securities.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement or issuer free writing prospectus relating to a particular offering. No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and any related issuer free writing prospectus in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement nor any related issuer free writing prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits.

You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related issuer free writing prospectus, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement or any issuer free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or issuer free writing prospectus is correct as of any date subsequent to the date hereof or of such prospectus supplement or issuer free writing prospectus, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

All references in this prospectus to “BioSig,” the “Company,” “we,” “us,” “our,” or similar terms refer to BioSig Technologies, Inc. and its subsidiaries taken as a whole, except where the context otherwise requires or as otherwise indicated.

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” and “would,” or the negative of these terms, or similar expressions. Such forward-looking statements are subject to certain risks, uncertainties and assumptions relating to factors that could cause actual results to differ materially from those anticipated in such statements, including, without limitation, the following:

- our history of recurring losses and negative cash flows from operating activities and the uncertainty regarding the adequacy of our liquidity to pursue or complete our business objectives, and substantial doubt regarding our ability to continue as a going concern;
- the results of ongoing and future clinical studies;
- our inability to successfully develop or commercialize our product candidates;
- market acceptance of existing and new products;
- our inability to carry out research, development and commercialization plans;
- our inability to complete preclinical testing and clinical trials as anticipated;
- changes in our relationship with key collaborators;
- our ability to adequately protect and enforce rights to intellectual property;
- our need to raise additional capital to meet our business requirements in the future and the difficulties in obtaining financing on commercially reasonable terms, or at all;
- intense competition in our industry, with competitors having substantially greater financial, technological, research and development, regulatory and clinical, manufacturing, marketing and sales, distribution and personnel resources than we do;

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- entry of new competitors and products and potential technological obsolescence of our products;
- effect of healthcare legislation or reform measures that may substantially change the market for medical care or healthcare coverage in the U.S.;
- our failure to obtain regulatory approvals;
- adverse market and economic conditions;
- our ability to maintain the listing of our common stock on The Nasdaq Capital Market;
- our business, results of operations and financial condition may be adversely impacted by public health epidemics, including the COVID-19 outbreak;
- loss of one or more key executives;
- difficulties in securing and retaining regulatory approval to market our product and product candidates; and
- depth of the trading market in our common stock.

You should read this prospectus, the applicable prospectus supplement and any related free-writing prospectus and the documents incorporated by reference in this prospectus with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect. The forward-looking statements contained or incorporated by reference in this prospectus or any prospectus supplement are expressly qualified in their entirety by this cautionary statement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider before investing in our securities. You should carefully read the prospectus, the information incorporated by reference and the registration statement of which this prospectus is a part in their entirety before investing in our securities, including the information discussed under “Risk Factors” in this prospectus and the documents incorporated by reference and our financial statements and notes thereto that are incorporated by reference in this prospectus. Some of the statements in this prospectus and the documents incorporated by reference herein constitute forward-looking statements that involve risks and uncertainties. See information set forth under the section “Cautionary Statement Regarding Forward-Looking Statements.”

Overview

BioSig Technologies, Inc.

We are a medical technology company commercializing a proprietary biomedical signal processing platform designed to improve signal fidelity and uncover the full range of electrocardiogram (“ECG”) and intra-cardiac signals. Our initial emphasis is on providing intracardiac signal information to electrophysiologists during electrophysiology (“EP”) studies and cardiac catheter ablation procedures. 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 510(k) clearance from the U.S. Food and Drug Administration (the “FDA”) to market our PURE (Precise Uninterrupted Real-time evaluation of Electrograms) EP System.

PURE EP™ is a proprietary signal acquisition and processing technology. Our device is a computerized system intended for acquiring, digitizing, amplifying, filtering, measuring and calculating, displaying, recording, and storing of electrocardiographic and intracardiac signals for patients undergoing EP procedures in an EP laboratory under the supervision of licensed healthcare practitioners who are responsible for interpreting the data. The device aims to minimize noise and artifacts from cardiac recordings and acquire high-fidelity cardiac signals. Improving fidelity of acquired cardiac signals may potentially increase the diagnostic value of these signals, thereby possibly improving the accuracy and efficiency of the EP studies and related procedures.

Our initial focus is on improving intracardiac signal acquisition and enhancing diagnostic information for catheter ablation procedures for complex arrhythmias like ventricular tachycardia (“VT”), a potentially life-threatening arrhythmia, and atrial fibrillation (“AF”), the most common cardiac arrhythmia associated with a fivefold risk of stroke.

On February 18 and February 19, 2019, we conducted the first clinical cases with our PURE EP™ System. The observational patient cases were performed by Andrea Natale, M.D., F.A.C.C., F.H.R.S., F.E.S.C., Executive Medical Director, Texas Cardiac Arrhythmia Institute at St. David’s Medical Center in Austin, Texas. On April 16, 2019, we announced the completion of our second set of observational patient cases, which were performed at Prisma Health at Greenville Health System in South Carolina by Andrew Brenyo, MD, FHRS. Dr. Brenyo used the PURE EP™ System during procedures on patients with ischemic ventricular tachycardias, AF, PVC, and atypical flutters.

On May 6, 2019, we announced the completion of our third set of observational patient cases at Indiana University under the leadership of Prof. John M. Miller, M.D., and Dr. Mithilesh K. Das, MBBS. Drs. Miller and Das used the PURE EP™ System during procedures on patients with atypical flutter, atrioventricular nodal reentry tachycardia (AVNRT), AF, supraventricular tachycardia, premature ventricular contractions, and a rare case of dual septal pathway. In August 2019, observational patient cases at Santa Barbara Cottage Hospital in California were performed by Brett Andrew Gidney, M.D. The initial experience across these early evaluation centers showed the PURE EP™ System functions as designed with positive feedback from EP users about the improved signal detection and fidelity.

In November 2019, we commenced our first clinical study for the PURE EP™ System titled, “Novel Cardiac Signal Processing System for Electrophysiology Procedures (PURE EP 2.0 Study).” Texas Cardiac Arrhythmia Research Foundation (TCARF) in Austin, Texas, was the first institution to conduct patient cases under the clinical study. On January 16, 2020, we announced the installation of a PURE EP™ System at Mayo Clinic Florida campus in Jacksonville, Florida. Mayo Clinic was the second institution to conduct patient cases under the same clinical study.

On August 4, 2020, the Company announced the installation of a PURE EP™ System at Massachusetts General Hospital (MGH) as part of the expanding clinical study. On September 23, 2020, we installed PURE EP™ System at the University of Pennsylvania Hospital, and on October 29, 2020, we announced the installation of our PURE EP™ System at the Deborah Heart and Lung Center in Browns Mills, New Jersey for clinical evaluation. As of December 30, 2020, 74 patients have been enrolled in the study.

In addition to clinical evaluation, we have conducted a total of twenty-seven pre-clinical studies with the PURE EP™ System, twenty-two of which were performed at Mayo Clinic in Rochester, Minnesota. We also conducted a pre-clinical study at the Mount Sinai Hospital in New York, New York, with an emphasis on the VT model; and four pre-clinical studies at the University of Pennsylvania. We intend to continue additional research and development studies with our technology at Mayo Clinic and the University of Pennsylvania. We also intend to continue additional clinical external evaluation at a select number of other centers.

We have made progress towards obtaining a European CE marking certificate for medical devices. Leading up to a new Medical Device Regulation that was due to enter into full force in 2020 but has since been put on hold for one year, the European Notified Bodies reported delays in accepting and processing new applications throughout 2019. We intend to commence audit preparation for the International Organization for Standardization (“ISO”) 13485 and Medical Device Single Audit Program certification with the expectation to proceed with the audit to obtain the ISO 13485 Certification and CE Mark in the first half of 2021 and subsequently file for CE Mark in the second half of 2021.

In December 2020, we announced the sale of three PURE EP™ Systems to St. David’s Healthcare of Austin, Texas. Additionally, we are in active discussions with numerous accounts about the acquisition of the PURE EP™ System. We anticipate our initial customers will be medical centers of excellence and other health care facilities that operate EP labs.

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. Our principal executive offices are located at 54 Wilton Road, 2nd Floor, Westport, Connecticut 06880, and our telephone number is (203) 409-5444. Our website address is www.biosig.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the “Investors” section of our web site as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the SEC. Information contained on our website does not form a part of this prospectus.

The Securities We May Offer

We may offer up to \$75,000,000 of common stock, preferred stock, warrants and/or units in one or more offerings and in any combination. This prospectus provides you with a general description of the securities we may offer. A prospectus supplement, which we will provide each time we offer securities, will describe the specific amounts, prices and terms of these securities.

Common Stock

We may issue shares of our common stock from time to time. 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. We have never paid cash dividends on our common stock and do not anticipate paying any cash dividends in the foreseeable future but intend to retain our capital resources for reinvestment in our business. 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. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock, which may be designated solely by action of our board of directors and issued in the future.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, without any further vote or action by stockholders. Convertible preferred stock will be convertible into our common stock or exchangeable for our other securities. Conversion may be mandatory or at your option or both and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus and applicable prospectus supplements, we will fix the rights, preferences, privileges and restrictions of the preferred stock of such series in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Warrants

We may issue warrants for the purchase of common stock or preferred stock in one or more series. We may issue warrants independently or together with common stock or preferred stock, and the warrants may be attached to or separate from these securities. We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into warrant agreements with a bank or trust company that we select to be our warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement related to the particular series of warrants being offered, as well as the warrant agreements and warrant certificates that contain the terms of the warrants. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement or warrant certificate containing the terms of the warrants we are offering before the issuance of the warrants.

Units

We may issue units consisting of common stock, preferred stock and/or warrants for the purchase of common stock or preferred stock in one or more series. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the applicable prospectus supplement related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Part II, Item 1A, "Risk Factors," in our most recent Annual Report on Form 10-K or any updates in our Quarterly Reports on Form 10-Q which are incorporated herein by reference, as updated or superseded by the risks and uncertainties described under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus and any prospectus supplement related to a particular offering. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section above entitled "Cautionary Statement Regarding Forward-Looking Statements."

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities which may be offered pursuant to this prospectus. Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for our operations and for other general corporate purposes, including, but not limited to, general working capital and possible future acquisitions. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in investment-grade, interest-bearing securities such as money market funds, certificates of deposit, or direct or guaranteed obligations of the U.S. government, hold as cash or apply them to the reduction of short-term indebtedness.

DESCRIPTION OF CAPITAL STOCK

The following description of common stock and preferred stock summarizes the material terms and provisions of the common stock and preferred stock that we may offer under this prospectus, but is not complete. For the complete terms of our common stock and preferred stock, please refer to our amended and restated certificate of incorporation, as amended, any certificates of designation for our preferred stock, and our amended and restated bylaws, as amended. While the terms we have summarized below will apply generally to any future common stock or preferred stock that we may offer, we will describe the specific terms of any series of preferred stock in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any preferred stock we offer under that prospectus supplement may differ from the terms we describe below.

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, 1,000 are authorized as Series E Preferred Stock and 200,000 are authorized as Series F Junior Participating Preferred Stock. As of December 30, 2020, there were 30,719,498 shares of common stock issued and outstanding, 105 shares of Series C Preferred Stock issued and outstanding and no shares of our Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series D Convertible Preferred Stock, Series E Convertible Preferred Stock or Series F Junior Participating Preferred Stock issued and outstanding. The authorized and unissued shares of common stock and the authorized and undesignated shares of preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. Unless approval of our stockholders is so required, our board of directors does not intend to seek stockholder approval for the issuance and sale of our common stock or 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. We have never paid cash dividends on our common stock and do not anticipate paying any cash dividends in the foreseeable future but intend to retain our capital resources for reinvestment in our business. 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.

The transfer agent and registrar for our common stock is Action Stock Transfer Corporation. The transfer agent’s address is 2469 East Fort Union Blvd., Suite 214, Salt Lake City, UT 84121. Our common stock is listed on the Nasdaq Capital Market under the symbol “BSGM.”

Preferred Stock

The board of directors is authorized, subject to any limitations prescribed by law, without further vote or action by the stockholders, to issue from time to time shares of preferred stock in one or more series. Each such series of preferred stock shall have such number of shares, designations, preferences, voting powers, qualifications, and special or relative rights or privileges as shall be determined by the board of directors, which may include, among others, dividend rights, voting rights, liquidation preferences, conversion rights and preemptive rights. Issuance of preferred stock by our board of directors may result in such shares having dividend and/or liquidation preferences senior to the rights of the holders of our common stock and could dilute the voting rights of the holders of our common stock.

Prior to the issuance of shares of each series of preferred stock, the board of directors is required by the Delaware General Corporation Law (the “DGCL”) and our certificate of incorporation to adopt resolutions and file a certificate of designation with the Secretary of State of the State of Delaware. The certificate of designation fixes for each class or series the designations, powers, preferences, rights, qualifications, limitations and restrictions, including, but not limited to, some or all of the following:

- the number of shares constituting that series and the distinctive designation of that series, which number may be increased or decreased (but not below the number of shares then outstanding) from time to time by action of the board of directors;
- the dividend rate and the manner and frequency of payment of dividends on the shares of that series, whether dividends will be cumulative, and, if so, from which date;
- whether that series will have voting rights, in addition to any voting rights provided by law, and, if so, the terms of such voting rights;
- whether that series will have conversion privileges, and, if so, the terms and conditions of such conversion, including provision for adjustment of the conversion rate in such events as the board of directors may determine;
- whether or not the shares of that series will be redeemable, and, if so, the terms and conditions of such redemption;
- whether that series will have a sinking fund for the redemption or purchase of shares of that series, and, if so, the terms and amount of such sinking fund;
- whether or not the shares of the series will have priority over or be on a parity with or be junior to the shares of any other series or class in any respect;
- the rights of the shares of that series in the event of voluntary or involuntary liquidation, dissolution or winding up of the corporation, and the relative rights or priority, if any, of payment of shares of that series; and
- any other relative rights, preferences and limitations of that series.

Once designated by our board of directors, each series of preferred stock may have specific financial and other terms that will be described in a prospectus supplement. The description of the preferred stock that is set forth in any prospectus supplement is not complete without reference to the documents that govern the preferred stock. These include our certificate of incorporation and any certificates of designation that our board of directors may adopt.

All shares of preferred stock offered hereby will, when issued, be fully paid and nonassessable, including shares of preferred stock issued upon the exercise of preferred stock warrants or subscription rights, if any.

Although our board of directors has no intention at the present time of doing so, it could authorize the issuance of a series of preferred stock that could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt.

Anti-Takeover Effects of Certain Provisions of Delaware Law, our Certificate of Incorporation, Bylaws and Stockholder Rights Agreement

Delaware Law

We are subject to Section 203 of the DGCL. 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:

- 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;

- 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 (i) shares owned by persons who are directors and also officers and (ii) 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
- 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 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

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 DGCL or, with certain exceptions, which do not have a class of voting stock that is listed on a national securities exchange or held of record by more than 2,000 stockholders. Our certificate of incorporation and bylaws do not opt out of Section 203.

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

Certificate of Incorporation and Bylaws

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

- permit our board of directors to issue up to 1,000,000 shares of preferred stock, without further action by the stockholders, with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change in control;
- provide that the authorized number of directors may be changed only by a resolution adopted by a majority of the total number of authorized directors;
- 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); 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.

Stockholder Rights Agreement

On July 14, 2020, we entered into a stockholder rights agreement with Action Stock Transfer Corporation, as rights agent (the “Rights Agreement”), which entitles the holders of the rights to purchase from the Company 1/1,000th of a share of the Company’s Series F Junior Participating Preferred Stock, \$0.001 par value per share, at a purchase price of \$50.00 per share, subject to certain adjustments (a “Right”), upon certain trigger events. In connection therewith, on July 14, 2020, the board of directors authorized 200,000 shares of Series F Junior Participating Preferred Stock and it declared a dividend of one Right for each share of common stock of the Company outstanding as of July 27, 2020. Each 1/1,000th of a share of Series F Junior Participating Preferred Stock will essentially be the economic equivalent of one share of our common stock. However, until a Right is exercised or exchanged in accordance with the provisions of the Rights Agreement, the holder thereof will have no rights as a stockholder of the Company, including, but not limited to, the right to vote or to receive dividends.

The Rights do not separate from the common stock unless one or both of the following conditions are met: a public announcement that a person or group becomes the beneficial owner of 12% or more of the Company’s outstanding common stock (including in the form of synthetic ownership through derivative positions) (such person, an “Acquiring Person”), or a tender or exchange offer is made which, if completed, would result in the bidder becoming an Acquiring Person.

In the event that any person or group of affiliated or associated persons becomes an Acquiring Person, each holder of a right, other than rights beneficially owned by the Acquiring Person (which will become void), will have the right to purchase, at the right’s exercise price, a number of shares of the Company’s common stock (or equivalent securities) having a market value of twice the right’s exercise price. The rights may be redeemed by the Company for \$0.001 per right at any time until the first public announcement of the acquisition of beneficial ownership of 12% of the Company’s common stock.

The Rights expire upon the earliest to occur of (i) the close of business on July 13, 2021; (ii) the time at which the Rights are redeemed or exchanged pursuant to the Rights Agreement; and (iii) the time at which the Rights are terminated upon the closing of any merger or other acquisition transaction involving the Company pursuant to a merger or other acquisition agreement that has been approved by the Board prior to any person becoming an Acquiring Person.

The Rights have certain anti-takeover effects. The Rights may cause substantial dilution to a person or group of affiliated or associated persons that acquires beneficial ownership of 12% or more of the Company’s stock on terms not approved by the board of directors or takes other specified actions. As a result, the overall effect of the Rights may be to render more difficult or discourage any attempt to acquire us even if the acquisition may be favorable to the interests of our stockholders. Because the board of directors can redeem or exchange the Rights, the Rights should not interfere with a merger or other business combination approved by the board. We can make no assurances the rights plan will be effective in meeting its intended objectives, including to deter a change in control.

The description of our Series F Junior Participating Preferred Stock, which is contained in the Registration Statement on Form 8-A (File No. 001-38659) filed with the SEC on July 17, 2020, including any amendments or reports we file for purposes of updating that description, is incorporated herein by reference.

DESCRIPTION OF WARRANTS

As of December 30, 2020, there were outstanding warrants to purchase 1,451,667 shares of common stock.

We may issue warrants for the purchase of common stock or preferred stock in one or more series. We may issue warrants independently or together with common stock or preferred stock, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we may issue under a separate agreement. We may enter into a warrant agreement with a warrant agent. Each warrant agent may be a bank that we select which has its principal office in the United States. We may also choose to act as our own warrant agent. We will indicate the name and address of any such warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase common stock or preferred stock, the number or amount of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which and currency in which these shares may be purchased upon such exercise;
- the manner of exercise of the warrants, including any cashless exercise rights;
- the warrant agreement under which the warrants will be issued;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- anti-dilution provisions of the warrants, if any;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire or, if the warrants are not continuously exercisable during that period, the specific date or dates on which the warrants will be exercisable;
- the manner in which the warrant agreement and warrants may be modified;
- the identities of the warrant agent and any calculation or other agent for the warrants;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants;
- any securities exchange or quotation system on which the warrants or any securities deliverable upon exercise of the warrants may be listed or quoted; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including, in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 P.M. eastern time, the close of business, on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required exercise price by the methods provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate, and in the applicable prospectus supplement, the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants.

Enforceability of Rights by Holders of Warrants

Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action the holder's right to exercise, and receive the securities purchasable upon exercise of, its warrants in accordance with their terms.

Warrant Agreement Will Not Be Qualified Under Trust Indenture Act

No warrant agreement will be qualified as an indenture, and no warrant agent will be required to qualify as a trustee, under the Trust Indenture Act of 1939. Therefore, holders of warrants issued under a warrant agreement will not have the protection of the Trust Indenture Act of 1939 with respect to their warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, each warrant agreement and any warrants issued under the warrant agreements will be governed by New York law.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus or any prospectus supplement in any combination. Each unit will be issued so that the holder of the unit is also the holder, with the rights and obligations of a holder, of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any times before a specified date or upon the occurrence of a specified event or occurrence.

The applicable prospectus supplement will describe:

- the designation and the terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any unit agreement under which the units will be issued;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

We may sell the securities offered pursuant to this prospectus from time to time in one or more transactions, including, without limitation:

- to or through underwriters;
- through broker-dealers (acting as agent or principal);
- through agents;
- directly by us to one or more purchasers (including our affiliates and stockholders), through a specific bidding or auction process, a rights offering or otherwise;
- through a combination of any such methods of sale; or
- through any other methods described in a prospectus supplement or free writing prospectus.

The distribution of securities may be effected, from time to time, in one or more transactions, including:

- block transactions (which may involve crosses) and transactions on The Nasdaq Capital Market or any other organized market where the securities may be traded;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to a prospectus supplement or free writing prospectus;
- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- sales “at the market” to or through a market maker or into an existing trading market, on an exchange or otherwise; and
- sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

The applicable prospectus supplement or free writing prospectus will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if, and if required, any dealers or agents;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any underwriting discounts and other items constituting underwriters’ compensation;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed or traded.

We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; or
- negotiated prices.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent, and the underwriters will be obligated to purchase all of the offered securities, if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly for the purpose of resale or distribution, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the common stock by them may be deemed to be underwriting discounts and commissions under the Securities Act of 1933, as amended.

We may provide agents, underwriters and other purchasers with indemnification against particular civil liabilities, including liabilities under the Securities Act of 1933, as amended, or contribution with respect to payments that the agents, underwriters or other purchasers may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

To facilitate the public offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

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Unless otherwise specified in the applicable prospectus supplement, any common stock sold pursuant to a prospectus supplement will be eligible for listing on The Nasdaq Capital Market, subject to official notice of issuance. Any underwriters to whom securities are sold by us for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

In order to comply with the securities laws of some states, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities 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 complied with.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Haynes and Boone, LLP, New York, New York.

EXPERTS

Our consolidated financial statements as of December 31, 2019 and 2018 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 MORE INFORMATION

We are subject to the informational requirements of the Exchange Act, and in accordance therewith file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an internet website at www.sec.gov that contains periodic and current reports, proxy and information statements and other information regarding registrants that are filed electronically with the SEC.

These documents are also available, free of charge, through the Investors section of our website, which is located at www.biosig.com.

We have filed with the SEC a registration statement under the Securities Act of 1933, as amended, relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement for free at www.sec.gov. The registration statement and the documents referred to below under "Incorporation of Documents by Reference" are also available on our website, www.biosig.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 DOCUMENTS BY REFERENCE

The SEC 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 SEC will automatically update and supersede this information. We specifically are incorporating by reference the following documents filed with the SEC (excluding those portions of any Current Report on Form 8-K that are furnished and not deemed “filed” pursuant to the General Instructions of Form 8-K):

- our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on [March 13, 2020](#);
- the portions of our Definitive Proxy Statement on Schedule 14A filed with the SEC on [April 29, 2020](#) that are deemed “filed” with the SEC;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed with the SEC on [May 11, 2020](#), our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, filed with the SEC on [August 6, 2020](#), and as amended on [August 28, 2020](#), and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, filed with the SEC on [November 5, 2020](#);
- our Current Reports on Form 8-K filed with the SEC on [January 17, 2020](#), [February 19, 2020](#), [February 24, 2020](#), [February 26, 2020](#), [March 5, 2020](#), [March 25, 2020](#), [April 13, 2020](#), [April 16, 2020](#), [April 16, 2020](#), [April 20, 2020](#), [April 22, 2020](#), [April 24, 2020](#), [May 1, 2020](#), [May 8, 2020](#), [May 15, 2020](#), [May 19, 2020](#), [May 22, 2020](#), [June 1, 2020](#), [June 1, 2020](#), [June 2, 2020](#), [June 3, 2020](#), [June 5, 2020](#), [June 26, 2020](#), [June 26, 2020](#), [June 30, 2020](#), [July 2, 2020](#), [July 8, 2020](#), [July 16, 2020](#), [July 16, 2020](#), [July 17, 2020](#), [July 20, 2020](#), [July 21, 2020](#), [July 27, 2020](#), [August 28, 2020](#), [September 3, 2020](#), and [November 3, 2020](#); 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.

All reports and definitive proxy or information statements subsequently filed after the date of this initial registration statement and prior to effectiveness of this registration statement by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, but excluding information furnished to, rather than filed with, the SEC, shall be deemed to be incorporated by reference herein and to be a part hereof from the date such documents are filed.

Any statement contained herein or in any document incorporated or deemed to be incorporated by reference shall be deemed to be modified or superseded for purposes of the registration statement of which this prospectus forms a part to the extent that a statement contained in any other subsequently filed document which also is or is deemed to be incorporated by reference modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed to constitute a part of the registration statement of which this prospectus forms a part, except as so modified or superseded.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in this prospectus but not delivered with this prospectus (other than an exhibit to these filings, unless we have specifically incorporated that exhibit by reference in this prospectus). Any such request should be addressed to us at:

BioSig Technologies, Inc.
Attn: Chief Executive Officer
54 Wilton Road, 2nd Floor
Westport, Connecticut 06880
(203) 409-5444

You may also access the documents incorporated by reference in this prospectus through our website at www.biosig.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.



**Up to \$30,000,000
Common Stock**

PROSPECTUS SUPPLEMENT



ASCENDANT
CAPITAL MARKETS, LLC

September 15, 2023