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# BioSig's PURE EP™ System Highlighted in the Journal of Atrial Fibrillation & Electrophysiology

**Clinical abstract focuses on value of PURE EP™'s and its groundbreaking High Frequency Algorithm (HFA) during pulmonary vein isolation**

Westport, CT, Dec. 06, 2022 (GLOBE NEWSWIRE) --[BioSig Technologies, Inc.](#) (NASDAQ: BSGM) ("BioSig" or the "Company") an advanced digital signal processing technology company delivering unprecedented accuracy and precision to intracardiac signal visualization with its proprietary PURE EP™ System, today announced that a peer-reviewed case report titled, "[Confirmation of Acute Pulmonary Vein Reconnection with The Utilization of PURE EP's High-Frequency Algorithm \(HFA\)](#)" has been published in the Journal of Atrial Fibrillation & Electrophysiology. The publication is available electronically via the JAFIB-EP open access digital journal.

Co-authored by Roy Chung, MD, Clinical Cardiac Electrophysiologist at Cleveland Clinic and Zachary Koch, CCDS, CEPS, Clinical Director at BioSig Technologies, Inc., the case report describes a 65-year-old patient with a medical history of symptomatic and persistent atrial fibrillation undergoing pulmonary vein isolation (PVI). PURE EP™'s HFA signal analysis was observed alongside the simultaneous signal annotation produced by a 3D mapping system. PURE EP™'s real-time HFA identified early local activation, providing a clear and precise location that served as the primary target for ablation therapy during the procedure. Results from the case study support the efficacy of PURE EP™'s HFA in identification of the pulmonary vein gap compared to the inferior annotation produced by the 3D mapping system.<sup>1</sup>

"This case study adds to the growing pipeline of clinical evidence validating the PURE EP™ System as an essential and valuable technology for today's EP lab—particularly for challenging cases," commented Gray Fleming, Chief Commercial Officer, BioSig Technologies, Inc. "We believe that these findings, along with other clinical applications we continue to explore in collaboration with the Cleveland Clinic, demonstrate PURE EP™'s ability to set new standards in the field of electrophysiology."

In October, the Company signed a [master research agreement](#) with Cleveland Clinic to explore expanded applications for its digital signal processing technology.

The proprietary High Frequency Algorithm (HFA)—a proprietary feature found only in the

PURE EP™ System—reclaims the specificity lost within the blended data of the traditional bipolar wave. HFA enables electrophysiologists to apply specific near-field frequency data to the treatment of even the most complex arrhythmias. By removing unnecessary distractions, the PURE EP™ System with HFA preserves the value of cardiac signals and delivers clear, actionable insights to today's electrophysiologist.

### **About BioSig Technologies**

[BioSig Technologies](#) is an advanced digital signal processing technology company bringing never-before-seen insights to the treatment of cardiovascular arrhythmias. Through collaboration with physicians, experts, and healthcare leaders across the field of electrophysiology (EP), BioSig is committed to addressing healthcare's biggest priorities — saving time, saving costs, and saving lives.

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

[The PURE EP™ System](#) is currently in a national commercial launch and an integral part of well-respected healthcare systems, such as Mayo Clinic, Texas Cardiac Arrhythmia Institute, Cleveland Clinic, and Kansas City Heart Rhythm Institute. In a [blinded clinical study](#) recently published in the Journal of Cardiovascular Electrophysiology, electrophysiologists rated PURE EP™ as equivalent or superior to conventional systems for 93.6% of signal samples, with 75.2% earning a superior rating.

The global EP market is projected to reach \$16B in 2028 with a 11.2% growth rate<sup>2</sup>

### **Forward-looking Statements**

This press release contains "forward-looking statements." Such statements may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "aims," "believes," "hopes," "potential" or similar words. Forward-looking statements are not guarantees of future performance, are based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond the Company's control, and cannot be predicted or quantified and consequently, actual results may differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, without limitation, risks and uncertainties associated with (i) the geographic, social and economic impact of COVID-19 on our ability to conduct our business and raise capital in the future when needed, (ii) our inability to manufacture our products and product candidates on a commercial scale on our own, or in collaboration with third parties; (iii) difficulties in obtaining financing on commercially reasonable terms; (iv) changes in the size and nature of our competition; (v) loss of one or more key executives or scientists; and (vi) difficulties in securing regulatory approval to market our products and product candidates. More detailed information about the Company and the risk factors that may affect the realization of forward-looking statements is set forth in the Company's filings with the Securities and Exchange Commission (SEC), including the Company's Annual Report on Form 10-K and its Quarterly Reports on Form 10-Q. Investors and security holders are urged to read these documents free of charge on the SEC's website at <http://www.sec.gov>. The Company assumes no obligation to publicly update or revise its forward-looking statements as a result of new

information, future events or otherwise.

1 Koch W. Zachary; Chung, Roy (2022), Confirmation of Acute Pulmonary Vein Reconnection with Case Report: The Utilization of PURE EP's High-Frequency Algorithm (HFA), Journal of Atrial Fibrillation & Electrophysiology, Volume 15, Issue 6, Nov 2022. <https://jafib-ep.com/journal/volume-15-issue-6-nov-2022/confirmation-of-acute-pulmonary-vein-reconnection-with-the-utilization-of-pure-eps-high-frequency-algorithm-hfa/>

2 Global Market Insights Inc. March 08, 2022.

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