

# New Publication Highlights Nerve Tape® in DIEP Flap Breast Reconstruction

Study Demonstrates Cost Reduction with Nerve Tape Without Prolonging Operative Time

**May 20, 2026, Atlanta, GA** – BioCircuit Technologies today announced the publication of new clinical data evaluating the use of Nerve Tape® in dual-nerve coaptation during DIEP flap breast reconstruction. The study, published in the Journal of Plastic, Reconstructive & Aesthetic Surgery (JPRAS), noted that Nerve Tape use was associated with safe, reproducible neurotization and found that its use was associated with a reduction in hospital charges and supply costs compared to traditional coaptation methods.

The publication, titled ***“Dual-nerve coaptation using Nerve Tape in DIEP flap breast reconstruction: A cost-effective and efficient alternative to traditional methods,”*** was completed by Carson Gundlach, Nancy Qin, Annie McVeigh, Michael Stigliano, Hanelle Park-Lee, Paneed Jalili, Fiona Fragomen, Marcos Wang, and senior author Dr. David Otterburn of Weill Cornell Medicine and NewYork-Presbyterian/Weill Cornell Medical Center.

The retrospective review included 27 patients (54 breasts) and 108 total nerve coaptations. 15 patients received traditional coaptation, while 12 patients received Nerve Tape. Researchers reported no nerve-related complications and found that operative times were comparable between traditional repair methods and Nerve Tape.

According to the study, Nerve Tape was associated with reduced hospital billing charges along with direct supply costs per coaptation. Across the study period, the Nerve Tape group generated an estimated reduction of \$116,400 in hospital charges and \$33,600 in supply costs.

**“Dual-nerve coaptation using Nerve Tape during DIEP flap breast reconstruction was safe, reproducible, and associated with material cost reduction without prolonging operative time.”**

This work was presented at the American Society for Reconstructive Microsurgery Annual Meeting in January 2026.

This publication contributes to the growing body of evidence supporting sutureless nerve repair with Nerve Tape, with more than 12,000 implants to date.




[VIEW THE PUBLICATION](#) →

## ABOUT NERVE TAPE

Nerve Tape is indicated for the repair of peripheral nerve discontinuities where gap closure can be achieved by flexion of the extremity.

For more information and to access the Instructions for Use (IFU), visit [Nerve Tape](#)

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## ABOUT BIOCIRCUIT TECHNOLOGIES

Based in Atlanta, GA, BioCircuit Technologies develops and commercializes medical devices for tissue repair and neurorehabilitation. Designed for precision, ease-of-use, and reliability, these devices enhance surgical efficiency and therapeutic targeting for improved patient outcomes. In addition to small business funding from the National Institutes of Health (NINDS SB1NS137879 and R44NS097113), BioCircuit has attracted private financing, including investment from the GRA Venture Fund, Masters Capital, and Alsora Capital.

For more information, visit [BioCircuit Technologies](#)

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## CONTACT INFORMATION

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Limitations of the study include its retrospective design, modest sample size, short follow-up duration, and reliance on U.S. hospital billing data, which may limit generalizability. Economic results associated with Nerve Tape may vary based on hospital setting, patient pathology, and surgical technique.

BioCircuit Technologies provides research funding to Dr. David Otterburn. The sponsor was not involved in the study design, in the collection, analysis, or interpretation of data, or in the decision to submit the manuscript for publication.

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