



NEWS RELEASE

Neuromodulation Publishes Full 36-Month CORE-VNS Results Demonstrating Sustained and Increasing Benefits of LivaNova's VNS Therapy for Drug-Resistant Epilepsy

- *CORE-VNS is the largest prospective, multinational observational study evaluating contemporary VNS Therapy devices in people with Drug-Resistant Epilepsy*
- *Demonstrated 76% median reduction in seizure frequency and a durable clinical benefit*
- *Data also showed improvements in rescue medication use, healthcare resource utilization, seizure severity, and quality of life*

GLOUCESTER, England, OCT. 23, 2026 – LivaNova PLC (Nasdaq: LIVN), a market-leading medical technology company, today announced that the journal *Neuromodulation: Technology at the Neural Interface* has published the full 36-month results from the CORE-VNS study, the first long-term effectiveness evaluation of contemporary VNS Therapy™ devices in people with Drug-Resistant Epilepsy (DRE). The article, "[CORE-VNS Seizure and Non-Seizure 36 Month Outcomes in People with Drug-resistant Epilepsy](#),"¹ reports findings from the full international CORE-VNS cohort, providing one of the most extensive evaluations of long-term outcomes associated with contemporary VNS Therapy in people with DRE.

Conducted across 61 sites in 16 countries, CORE-VNS demonstrated favorable long-term outcomes and clinically meaningful effectiveness of adjunctive VNS Therapy in both children and adults with DRE. Significant benefits were observed as early as three months after implantation and sustained through 36 months of follow-up.

Among participants with available 36-month follow-up data, median seizure frequency was reduced by 76% from baseline. Within this same participant population, 64% achieved at least a 50% reduction in seizure frequency, including nearly half who experienced an 80% or greater reduction in seizures. Benefits extended beyond seizure reduction, including improvements in rescue medication use, healthcare resource utilization, seizure severity, and quality of life. Specifically, at 36 months:

- 16% (64/392; 95% confidence interval [CI] 13.3%–19.7%) achieved complete seizure freedom
- 28% (108/392; 95% CI 23.9%–31.5%) had a 100% reduction in the seizure types present at baseline

- 45% (174/391) reported improved quality of life
- 73% reduction in seizure-related hospitalizations compared to baseline

Importantly, investigators found that therapeutic benefit was durable throughout follow-up, with increasing proportions of participants progressing into higher response categories over time. Seizure freedom increased steadily over the course of the study, and most participants who responded to VNS Therapy either maintained or improved their outcomes at subsequent visits. Regression to lower response categories was uncommon.

Long-Term Benefits Sustained Through 36 Months

“This study provides compelling, real-world evidence supporting the long-term effectiveness and safety of modern VNS Therapy for people living with drug-resistant epilepsy,” said Arjune Sen, Professor of Global Epilepsy at The University of Oxford, Consultant Neurologist at Oxford University Hospitals NHS Foundation Trust, and coordinating investigator for the CORE-VNS study. “We observed meaningful clinical benefits as early as three months after implantation, and those benefits endured throughout the study period. Beyond reducing seizure frequency, the study demonstrated improvements in healthcare utilization and reductions in seizure severity. The CORE-VNS findings underscore the important role VNS Therapy can play in the long-term management of drug-resistant epilepsy and highlight the importance of timely referral to comprehensive epilepsy centers for evaluation once drug resistance has been established.”

Results Observed Across the Full CORE-VNS Cohort

The published analysis included 531 participants (of the more than 800 total in the broader study) receiving their first VNS Therapy implant, of whom 426 completed 36 months of follow-up, representing an 80% retention rate. The data also demonstrated significant reductions in seizure severity and post-ictal severity across all seizure types, with no new safety concerns identified.

Epilepsy affects over 50 million people worldwide,^{2,3} and approximately one-third of people living with epilepsy will develop DRE despite treatment with anti-seizure medications.⁴⁻⁶ Although current practice guidelines recommend referral to specialized epilepsy centers once drug resistance has been established, many patients experience significant delays before being evaluated for advanced treatment options.

“The findings published in *Neuromodulation* demonstrate not only a 76% median reduction in seizure frequency at three years but also meaningful benefits across multiple measures important to patients, caregivers, and healthcare systems,” said Stephanie Bolton, President, Global Epilepsy at LivaNova.

“Most encouragingly, the study showed that benefits from VNS Therapy emerged early and continued to improve over time, reinforcing its important role in the long-term management of Drug-Resistant Epilepsy.”

Benefits Extended Beyond Seizure Reduction

Beyond improvements in seizure outcomes, this analysis showed meaningful benefits across several aspects of disease management and patient well-being, including reduced seizure and post-ictal severity, changes in rescue medication use, improved quality of life, favorable safety outcomes, and reduced healthcare resource utilization.

The study also demonstrated substantial reductions in healthcare resource utilization. The percentage of participants reporting seizure-related emergency department visits decreased from 32% at baseline to 15% at 36 months, while seizure-related hospitalizations declined from 27% to 7%, representing a 73% reduction.

References

- 1 Sen A, Kwan P, Lyons P, Wheless J, Ferreira J, Liow K, et al. CORE-VNS Seizure and Non-Seizure 36 Month Outcomes in People with Drug-resistant Epilepsy. *Neuromodulation*. Published online October 5, 2026. doi:10.1016/j.neurom.2026.09.017.
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- 3 World Health Organization. Epilepsy: a public health imperative, 2019. Accessed October 24, 2025. <https://www.who.int/publications/i/item/epilepsy-a-public-health-imperative>
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- 6 Chen Z, Brodie MJ, Liew D, Kwan P. Treatment outcomes in patients with newly diagnosed epilepsy treated with established and new antiepileptic drugs: a 30-year longitudinal cohort study. *JAMA Neurol*. 2018; 75:279-286. doi:10.1001/jamaneurol.2017.3949

About CORE-VNS

CORE-VNS is a real-world, long-term, open-label study focused on the outcomes of VNS Therapy™ in people diagnosed with drug-resistant epilepsy (DRE). Enrolling more than 800 people from 61 sites worldwide, the study is the most comprehensive assessment of the effectiveness of VNS Therapy to date and provides modern insights into the global use of VNS Therapy in the management and control of seizures. As an observational study, outcomes reflect real-world clinical practice and should be interpreted within the context of the study design.

Adverse events in the CORE-VNS study were typical of those reported in the product labeling and experienced following placement of a VNS Therapy device. The most commonly reported (>5%) adverse events overall included respiratory, thoracic, and mediastinal disorders (dysphonia, dyspnea, cough) and general disorders/administration site conditions. See important safety information at VNSTherapy.com/safety.

About VNS Therapy™ for Epilepsy

VNS Therapy™ is approved and clinically proven safe and effective as an adjunctive therapy to reduce the frequency of seizures in adults and children with Drug-Resistant Epilepsy and focal onset seizures. It is a unique treatment approach developed for people with Drug-Resistant Epilepsy—a condition that affects approximately one in three people with epilepsy. Unlike some other surgical treatment options for people with Drug-Resistant Epilepsy, VNS Therapy implantation generally involves a day case procedure, with many completed in outpatient settings, and does not require penetration of the skull. Outside the United States, the VNS Therapy indications for use may vary. For more information, including indications, contraindications, warnings, and precautions, please visit VNSTherapy.com/safety.

About LivaNova

LivaNova PLC is a global medical technology company built on nearly five decades of experience and a vision to change the trajectory of lives for a new day. Through ingenious medical solutions in select neurological and cardiac conditions, LivaNova strives to ignite patient turnarounds. With its registered office in the United Kingdom, approximately 3,300 employees, and a presence in more than 100 countries, LivaNova serves patients, healthcare professionals, and healthcare systems worldwide. For more information, please visit www.livanova.com.

Safe Harbor Statement

This news release contains “forward-looking statements” concerning the Company’s goals, beliefs, expectations, strategies, objectives, plans, underlying assumptions, and other statements that are not necessarily based on historical facts. These statements include, but are not limited to, statements regarding clinical research and the treatment of Drug-Resistant Epilepsy with VNS Therapy™. Actual events may differ materially from those indicated in our forward-looking statements as a result of various factors, including those factors set forth in Item 1A of the Company’s most recent Annual Report on Form 10-K, as supplemented by any risk factors contained in Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. LivaNova undertakes no obligation to update the information contained in this press release to reflect subsequently occurring events or circumstances.

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