New Clinical Evidence Links Ceribell Point-of-Care EEG to Shorter Hospital Stays and Better Functional Outcomes Compared to Conventional EEG

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—Five abstracts presented at the 2024Neurocritical Care Society Annual Meeting demonstrated the clinical impact of the FDA-cleared Ceribell System and Ceribell's AI-powered Clarity™ algorithm—

—Clarity remains first and only device FDA 510(k) cleared for the diagnosis of electrographic status epilepticus—

SUNNYVALE, Calif., Oct. 16, 2024 /PRNewswire/ -- Ceribell, Inc. (Nasdaq: CBLL), a commercial-stage medical technology company focused on transforming the diagnosis and management of patients with serious neurological conditions, today announced the presentation of data in five abstracts at the 2024 Neurocritical Care Society (NCS) Annual Meeting being held from October 14-17 in San Diego. The analyses—which include 937 point-of-care EEG cases and recordings—add to the growing body of evidence highlighting the potential of Ceribell's point-of-care EEG (the Ceribell System) and AI-powered algorithm (Clarity™) to reduce hospital length of stay and improve functional outcomes* compared to conventional EEG.



Aaron Struck, M.D., assistant professor and director of University of Wisconsin Comprehensive Epilepsy Program and EEG Lab, presented two sub-analyses from the primary SAFER-EEG trial, a multicenter, retrospective study of adult patients monitored with EEG during a hospital stay.

"These two sub-analyses reinforce the importance of early seizure detection and management in improving outcomes for critically ill patients," said Dr. Struck, the principal investigator of the two pivotal sub-analyses. "By providing frontline clinicians with real-time monitoring for seizure detection, the Ceribell System has the potential to redefine how we care for patients at risk of seizures in acute care settings. Enabling earlier detection and intervention can lead to better patient outcomes and shorter hospital stays."

Research presented at NCS included:

- A sub-analysis of SAFER-EEG that demonstrated shorter median hospital stay and that patients initially monitored with Ceribell were 33% less likely to leave the hospital with significant functional disability.*
- A second sub-analysis of SAFER-EEG that linked Clarity seizure burden to poor functional outcomes as measured by the modified Rankin Scale.
- An analysis led by Khalid Alsherbini, M.D., F.N.C.S., from Banner University Medical Center in Phoenix, demonstrated that the Ceribell System provided reliable signal quality for up to 24 hours—the maximum duration examined— suggesting tha it supports long-term, continuous monitoring.
- Another analysis led by Dr. Alsherbini highlighted variability in clinicians' interpretation of EEG data, underscoring the importance of standardizing diagnosis with AI tools such as Clarity.
- An analysis by Veeresh Kumar Shivamurthy, M.D.,† from Saint Francis Hospital and Medical Center, Trinity Health of New England, demonstrated improved detection of status epilepticus and seizure-related patterns in the latest version of Clarity.

"When it comes to seizures, time is brain. Early detection and intervention are vital in the emergency department and the ICU, as millions of patients in these settings are at risk of non-convulsive seizures that can result in permanent brain injury and even death if left undetected and untreated," said Jane Chao, Ph.D., co-founder and chief executive officer of Ceribell. "The Ceribell System and our AI-powered Clarity algorithm help clinicians detect seizures in minutes, improving neurological outcomes as well as shortening hospital stays. The research presented at NCS demonstrates that the Ceribell System can offer earlier seizure detection and seizure monitoring, which have the potential to improve the speed and accuracy of diagnosis in acute care settings."

Ceribell is exhibiting in booth #203 at NCS.

Learn how Ceribell point-of-care EEG transforms patient care here.

About the Ceribell System
The Ceribell system is a novel, point-of-care EEG platform designed to address the unmet needs of patients in the acute care setting. By combining proprietary, highly portable, and rapidly deployable hardware with a sophisticated AI-powered algorithm, the Ceribell system enables rapid diagnosis and continuous monitoring of patients with neurological conditions. The Ceribell system is FDA 510(k) cleared for indicating suspected seizure activity and currently utilized in intensive care units and emergency rooms across the U.S. The Ceribell system received two FDA Breakthrough Device Designations in 2022, and in 2023, the latest generation of Ceribell's AI algorithm (Clarity™) made it the first and only device to receive 510(k) clearance for diagnosing electrographic status epilepticus. Subsequently, the Clarity algorithm received a New Technology Add-on Payment (NTAP) from the Centers for Medicare and Medicaid Services (CMS). The Ceribell System has been adopted by more than 500 hospitals and has been used to diagnose and monitor over 100,000 patients.

About Ceribell
Ceribell is a commercial-stage medical technology company focused on transforming the diagnosis and management of patients with serious neurological conditions. The Ceribell System is an AI-powered, rapidly deployable point-of-care electroencephalography ("EEG") platform designed to address the unmet needs of patients in the acute care setting. The company is headquartered in Sunnyvale, Calif.

**Using modified Rankin Scale score greater than or equal to 4 at discharge as an indicator of significant functional disability*
† Disclosure: Veeresh Kumar Shivamurthy is an employee of Ceribell.

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Abstracts
(1) Struck AF, et al. Association Between Functional Outcomes and Automated Seizure Burden Algorithm obtained via a rapid point-of-care EEG device. Neurocritical Care Society Abstracts from the 22nd Annual Meeting 2024. Neurocrit Care (2024).
(2) Struck AF, et al. Access to Rapid Point-of-care EEG in Academic Hospitals and its Association with Improved Patient Outcomes. Neurocritical Care Society Abstracts from the 22nd Annual Meeting 2024. Neurocrit Care (2024).
(3) Shivamurthy VKN, et al. Improvements in Detecting Nonconvulsive Status Epilepticus in Post-Cardiac Arrest Patients by an Automated Seizure-Burden Monitoring Algorithm. Neurocritical Care Society Abstracts from the 22nd Annual Meeting 2024. Neurocrit Care (2024).
(4) Alsherbini K, et al. Ceribell Point of Care EEG Provides High Quality Signal for Up to 24 Hours of Continuous Recording. Neurocritical Care Society Abstracts from the 22nd Annual Meeting 2024. Neurocrit Care (2024).
(5) Alsherbini K, et al. Inter-rater Variability When Determining Electrographic Status Epilepticus and the Implications for Single-Rater Accuracy Assessments. Neurocritical Care Society Abstracts from the 22nd Annual Meeting 2024. Neurocrit Care (2024).

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