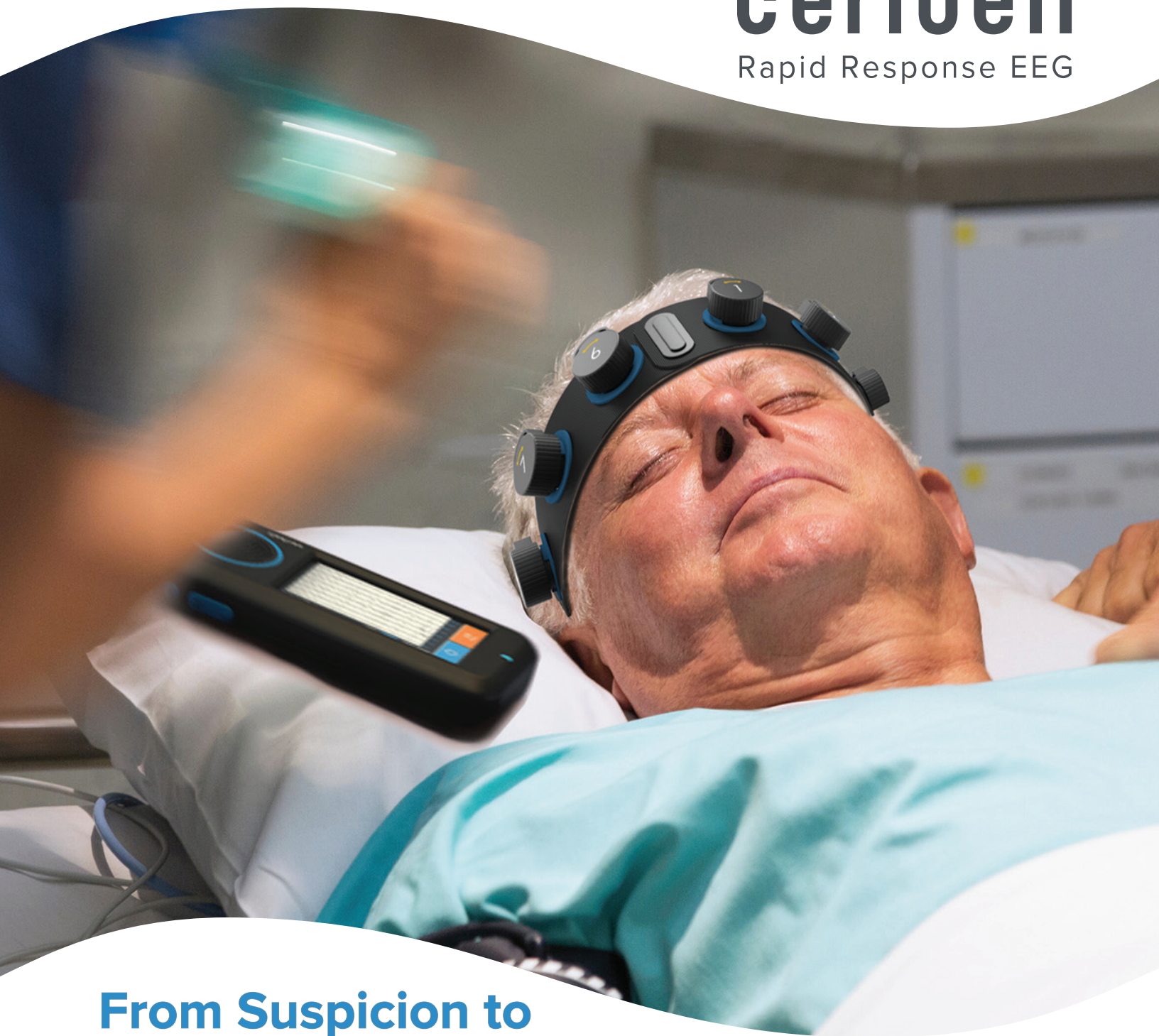


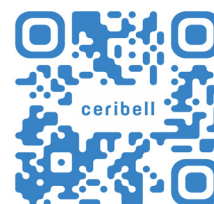
ceribell

Rapid Response EEG

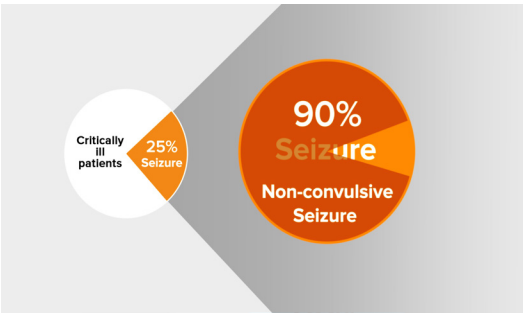
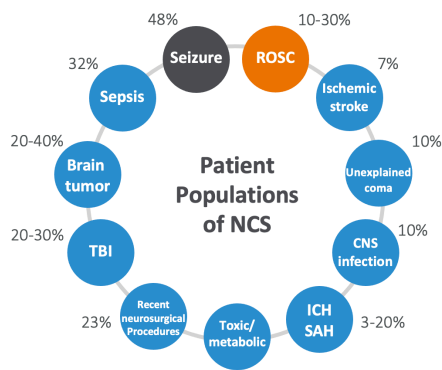


From Suspicion to Decision in Minutes

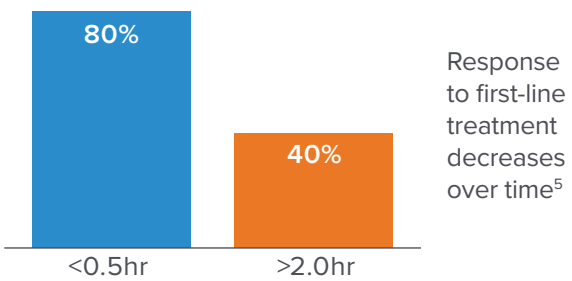
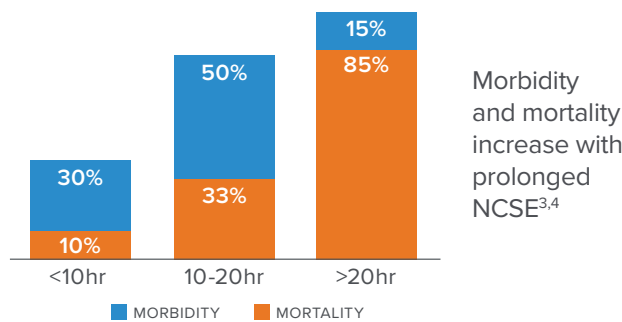
The world's first brain monitor for
point-of-care seizure triage and
treatment optimization



Seizures co-exist with many critical conditions and non-convulsive seizures are highly prevalent^{1,2}



Time to treatment is critical



Guidelines from medical societies recommend prompt EEG

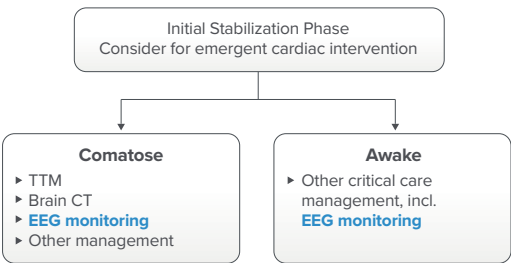


EEG should be initiated within **15-60 minutes** of suspected Status Epilepticus in all patients.⁶



We recommend **promptly performing and interpreting EEG** for the diagnosis of seizures in **all comatose patients after ROSC**.⁷

2020 Adult Post-cardiac Arrest Care Algorithm¹



“Early access to EEG will lead to early detection, and hence, more effective treatment of seizures, which will in turn prevent refractory status epilepticus; neuronal injury; and potentially deleterious impacts on patient morbidity, mortality, and long-term outcome in terms of cognitive disability, overall neurologic function, and development of chronic epilepsy.”

– The DECIDE⁸ Study Authors



The DECIDE⁸ study is a multi-center prospective observational clinical study that evaluates the Clinical Impact of the Ceribell Rapid Response EEG.



Any bedside clinician can set up EEG and triage seizure in minutes

ceribell

Rapid Response EEG

Ceribell EEG Headband

Allows any healthcare provider to set up in 5 minutes, accommodating various hair types and head sizes

Brain Stethoscope

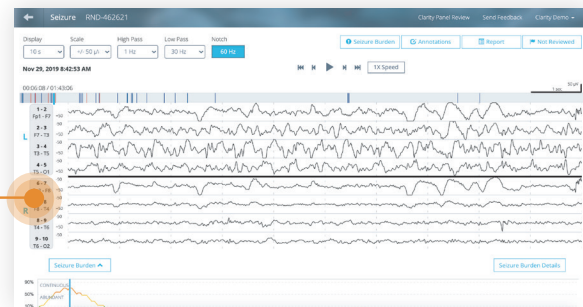
Individuals with no prior background in EEG can listen to the “sound of the brain” and detect seizures with remarkable accuracy

Ceribell EEG Recorder

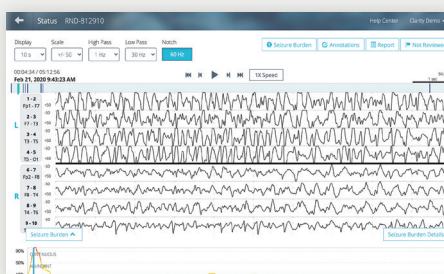
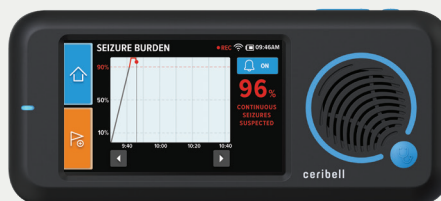
Pocket size and battery operated EEG recorder with on-device real time EEG display and streaming

Ceribell EEG Portal

Real time streaming of EEG data to a HIPAA compliant and secure cloud portal enables physicians to review EEG data from anywhere



24/7 continuous bedside EEG monitoring and alert



clarity

At the bedside, Clarity provides:

- First FDA-cleared instantaneous bedside alert indicating status epilepticus
- Continuous EEG monitoring and seizure burden display*⁹

Remotely, Clarity provides:

- Prelabeled EEG making EEG-reading more efficient
- First FDA-cleared seizure burden trend for effective patient management

*Seizure burden is the prevalence defined by the American Clinical Neurophysiology Society (ACNS) as the percentage of time that EEG shows seizure activity.



Clinically proven technology provides optimal care you can count on

Wait time for EEG

4 hrs

even in top academic centers with 24/7 on-site EEG technologists⁸

5 min

with Ceribell

	Conventional EEG	ceribell
Median	minutes 239	minutes 5
Interquartile Range	134-471	4-10
Number of observations	142	163

Diagnostic accuracy

with Ceribell was 90% and sensitivity of detection of status epilepticus was 100%.⁸

90%

	CLINICAL JUDGEMENT ALONE	CLINICAL JUDGEMENT WITH ceribell
Diagnostic Accuracy	65%	90%
Sensitivity	78%	100%
Specificity	64%	89%

Optimal care you can count on



Don't miss possible status epilepticus

100% sensitivity for status epilepticus¹⁰



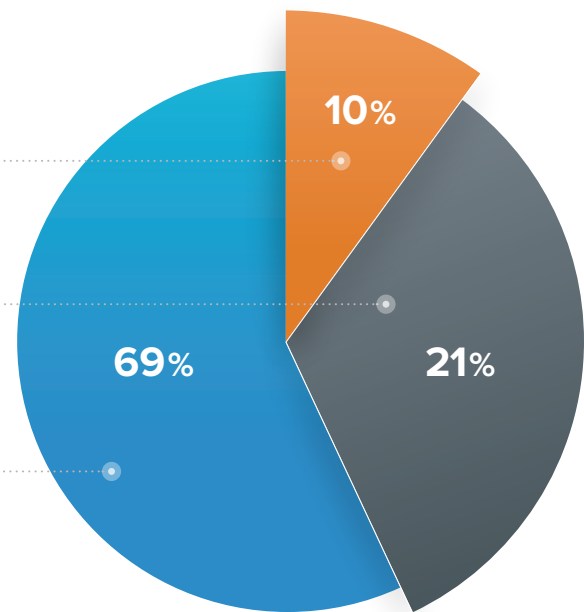
Highlight concerning patterns

Accurate annotations for non-emergent abnormal activity (seizure burden⁹ = 10-90%)¹⁰



Confidence to rule out seizure

99% negative predictive value¹⁰



Enhancing Your EEG capability to 24/7 on-site monitoring



- Minimize delays in treating non-convulsive status epilepticus
- Avoid unnecessary anti-epileptic medications
- Avoid unnecessary patient transfers
- Reduce patient length of stay



Optimize patient care and improve profitability while lowering costs

Increased EEG access leads to improved MS-DRG assignment with CC/MCC¹⁵

Each EEG-triggered CC/MCC leads to \$5k to \$24K additional coding per case

Intracranial vascular procedures
w pdx hemorrhage

\$23K

▲ = \$24K

\$47K

Intracranial hemorrhage
or Cerebral infarction

\$5K

▲ = 5K

\$10K

Traumatic stupor
& coma, coma < 1 HR

\$5K

▲ = 6K

\$11K

■ Base DRG w/MCC

■ (Major complication
or comorbidity)

Ceribell qualifies for the below EEG CPT codes

Routine EEG Codes - Codes include Professional and Technical components

Recording duration	8+ Channels - No video	
	Code	Code
20-40 Minutes	95816*	1.08
20-40 Minutes	95819*	1.08
41-60 Minutes	95812	1.08
61-119 Minutes	95813	1.63

* 95816 Awake & Drowsy
95819 Awake & Asleep

Long-Term EEG Codes - PROFESSIONAL Component

Recording duration	Referred to as	Time of report	8+ Channels - No video	
			Code	Work RVUs
2-12 Hour	Partial day	Daily Report	95717	2.0
12-26 Hour	Full day	Daily Report	95719	3.0

Long-Term EEG Codes - TECHNICAL Component

Recording duration	Monitoring - 8+ Channels - No video		
	None	Intermittent	Continuous
2-12 Hour	95705	95706	95707
12-26 Hour	95708	95709	95710

Ceribell should be used for:

- Complementing conventional EEG when tech/equipment is not available
- Critical care EEG
- Emergency EEG in ED or ICU to detect status epilepticus
- Prevention of treatment delays and of over-treatment

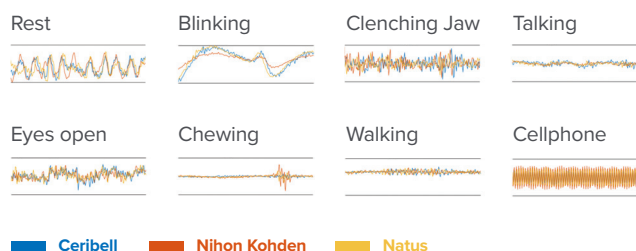
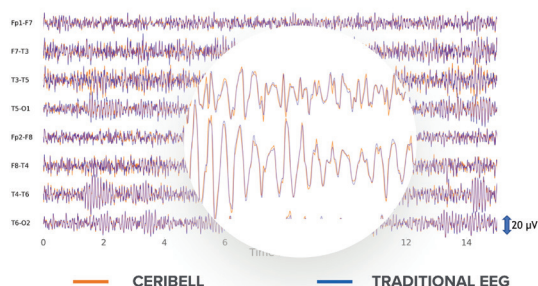
Ceribell should NOT be used for:

- Replacing long term video EEG monitoring
- Replacing conventional EEG to formally diagnose epilepsy



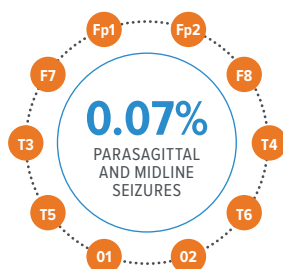
Neurology teams can be confident in critical care rapid EEG results

Ceribell's signal quality is equivalent to conventional EEG¹¹

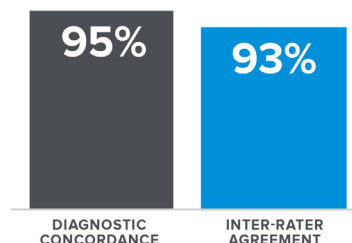


EEG using a circumferential 10-electrode montage meet the gold standard

An assessment of 169,510 EEGs showed that midline and parasagittal focal seizures were found in only 0.7% of EEGs.^{12,13}



The rm-EEG resulted in high diagnostic concordance (95%) with fm-EEG and high agreement between EEG-readers (93%) when ancillary information was equal.¹⁴



Benefits

Neurology gets compensated for reading Ceribell EEGs with CPT codes

Improve level of service and clinical care by reducing wait time for stat EEGs

Improve quality of life for EEG technologists

Quickly respond to stat EEG requests and ability to triage to long term monitoring to best utilize your techs' time and equipment

Improve quality of life for neurologists

If needed, Brain Stethoscope can be used by non-neurologists during after-hours to avoid late calls to neurologist. Ceribell offers easy remote access to EEGs from any device with an internet connection

Neurology develops the Ceribell EEG workflow

Neurology approves appropriate patient selection, patient volume, and reads the Ceribell EEGs

Grow neuro-service line without hiring additional EEG tech

Increase Neurology's Profitability as Ceribell EEG is typically paid for by the operational budget of the department managing those patients (ICU, etc.), while neurology charges for reading fees

For more information: e EEG@ceribell.com | p 1-800-436-0826 | www.ceribell.com

CAUTION: FEDERAL (US) LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A PHYSICIAN. REFER TO OPERATOR MANUAL AND LABELING FOR INDICATIONS, CONTRAINDICATIONS, WARNINGS, PRECAUTIONS AND INSTRUCTIONS FOR USE.

REFERENCES

- Herman, S. et al. J Clin Neurophysiol 2015;32:87-95, doi: 10.1097/WNP.0000000000000166
- Friedman, D. et al. Anesth Analg 2009;109:506-23, doi: 10.1213/ane.0b013e3181a9d8b5
- Young, G.B. et al. Neurology 1996;47:83-89, doi: 10.1212/wnl.47.1.83
- Beg, T.D. et al. J of Med Econ 2017;20:45-53, doi: 0.1080/13696998.2016.1223680
- Lowenstein, D.H. et al. Neurology 1993;43:483-8, doi: 0.1212/wnl.43.3_part_1.483
- Brophy, G. et al. Neurocrit Care 2012;17:3-23, doi: 10.1007/s12028-012-9695-z
- Panchal, A.R. et al. Circulation. 2020;142(suppl 2):S366-S468. DOI: 10.1161/CIR.0000000000000916
- Vespa, P. et al. Critical Care Medicine. 2020. doi: 10.1097/CCM.0000000000004428
- American Clinical Neurophysiology Society's Standardized Critical Care EEG Terminology: 2012. Journal of Clinical Neurophysiology, Volume 30, Number 1, February 2013
- Kamoussi, B. et al. Neurocrit Care 2020;34:908-917, doi:10.1007/s12028-020-01120-0
- Kamoussi, B. et al. Clin Neurophysiol Practice 2019;4:69-75, doi: 10.1016/j.cnp.2019.02.002
- Pedley, T. A. et al. Ann. Neurol. 1981;9:142-149, doi: 10.1002/ana.410090207
- Gururangan K. & Parvizi, J. 2019(online), doi: 10.1007/s12028-019-00804-6
- Westover, M. B. et al. Neurocrit Care 2020; doi:10.1007/s12028-019-00911-4
- Ney, J., (2016) Retrospective analysis of EEG enabled CC and MCC coding. Medicare database