# Accurate Diagnosis & Better Research

In-home, self-applied Polysomnography (PSG) Cerebra Sleep System with exclusive access to Odds Ratio Product (ORP) Sleep Architecture

#### CEREBRA IS A LEADER IN SLEEP DIAGNOSTIC TECHNOLOGY

Cerebra Sleep System combines lab quality sleep diagnostics with Home Sleep Apnea Testing (HSAT) convienience. The result is better, more comprehensive data for better, more accurate diagnosis.

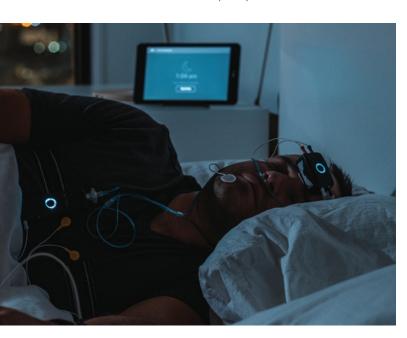


# Cerebra Sleep System is now authorized by the US Food and Drug Adminstration as a class II medical device.

## In-home, self-applied Cerebra Sleep System

#### Advanced and comprehensive innovation

Cerebra Sleep System is revolutionizing clinical sleep diagnostics by bringing truly self-applied full PSG capability to the home, allowing you to gain a true understanding of what happens during sleep using ORP - a highly validated measure of sleep depth.



Cerebra Sleep System is a powerful scientific sleep diagnostic technology enabling:

- PSG in patient's natural in-home environment
- Informed diagnosis of sleep disorders and ultimately personalized treatment
- Reduction of human bias and increased consistency for large data sets; increased sample size with consistent autoscoring
- Elimination of geographic barriers with remote access to a cloud platform to manage equipment, schedule sleep studies, read study results, produce patient reports, and more
- Reduced costs and decreased wait times compared to in-lab tests

#### Accurate and innovative in-home PSG

Cerebra Sleep System is the most advanced patient-applied system for in-home PSG. It provides comprehensive lab quality diagnostics and allows sleep to be measured where it happens - in the home.

Cerebra Sleep System includes Prodigy hardware that acquires:

- Brain waves (EEG)
- Eye movements (EOG)
- Respiratory data
- Pulse oximetry
- Heart rate (ECG)
- Chin and leg activity (EMG)
- Body position
- Snoring
- Oxygen saturation (SpO2)

The development of the ambulatory Cerebra Sleep System and innovative digital analysis of the PSG have provided unique and powerful research tools to investigate sleep. I anticipate that this will lead to new insights into the pathogenesis and management of sleep disorders.

Patrick Hanly, MD, FRCPC, D,ABSM Professor and Director Sleep Centre, Foothills Medical Centre, University of Calgary

#### **ORP**

#### ORP revolutionizes sleep diagnosis

Clinicians and researchers are seeing how ORP as a measure of sleep depth is vital to the diagnosis and understanding of Sleep Apnea and other sleep disorders.

ORP is being used in research that will ultimately lead to improved diagnosis and treatment. Through:

- Phenotyping Sleep Apnea and improving CPAP adherence
- Objectively quantifying co-morbid Insomnia and Sleep Apnea
- Supporting research in early disease detection and prevention
- Personalizing sleep medicine



#### ORP-9

ORP-9 assesses sleep depth after an EEG arousal and is a promising marker of central sleep drive. It provides new insights into drivers of sleep stability, quality and issues underlying a patient's Insomnia.

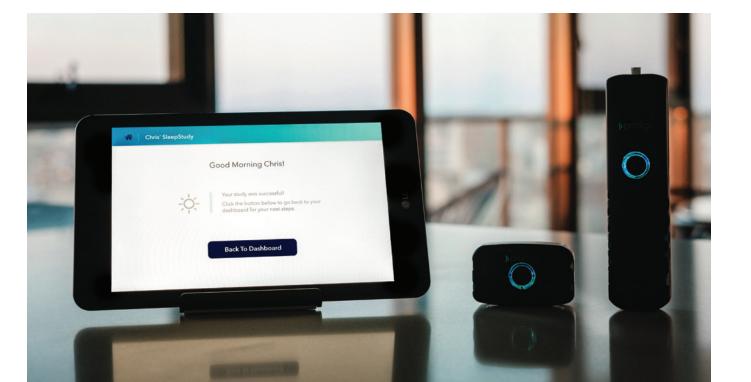
# Easy-to-use hardware, software and reporting platform

Cerebra Sleep System is comprised of advanced software, sophisticated hardware, and easy-to-use cloud-based platform. Cerebra Sleep System includes Prodigy data acquisition hardware, accessories, and consumables required to personalize and fulfill studies.

**Prodigy Data Acquisition Hardware:** Head unit, Chest unit, Tablet, NONIN wireless pulse oximeter

Accessories: Reusable hard case, Snap leads, Effort belts

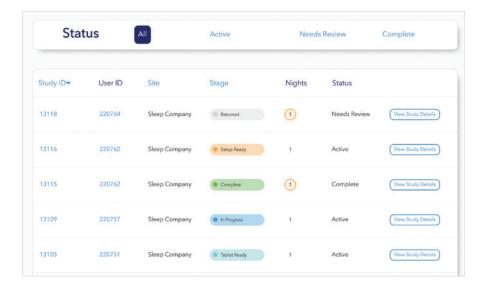
**Consumables:** Electrodes, Cannula, Medical tape & wipes



## Admin made easy

Cerebra's easy-to-use cloud-based platform supports telehealth.
Enables users to manage equipment, schedule sleep studies, remotely access results, generate patient reports and more.

- Provides lab-quality in-home data collection with wireless streaming
- Interactive tablet seamlessly guides patient set-up. No on-site technologist required
- Ability to check PSG data remotely for quality with confidence



# Flexible and interchangeable configuration

	CHANNELS	LEVEL 3	EEG ONLY	EEG + OX	LEVEL 2	LEVEL 2 (+LEGS)	LEVEL 2 (+ABDOMEN)	LEVEL 2 (+ECG)
HEAD UNIT	L/R FRONTAL EEG		<b>Ø</b>	<b>②</b>	<b>Ø</b>	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
	L/R EOG		<b>⊘</b>	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
	MASTOID (REFERENCE)		<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
	CHIN EMG				<b>Ø</b>		$\bigcirc$	
TABLET	AUDIO (SNORING)							
OX PULSE OXIMTER	PULSE							
	SPO2							
CHEST UNIT	BODY POSITION						$\bigcirc$	
	PRESSURE (NASAL CANNULA)							
	THORACIC EFFORT (RIP)	<b>Ø</b>			<b>Ø</b>	<b>Ø</b>	<b>⊘</b>	<b>②</b>
	ABDOMEN EFFORT (RIP)						<b>⊘</b>	<b>Ø</b>
	L/R LEG EMG					<b>Ø</b>	<b>⊘</b>	<b>②</b>
	STOMACH (REFERNCE)					<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
	ECG							<b>Ø</b>
	ECG GROUND							<b>Ø</b>

