The RecogniZe Software Option complements the Olympic Brainz Monitor’s neonatal bedside brain monitoring with automatic marking of possible seizure activity.

**RecogniZe the problem**

**FACT:** Neonatal seizures are usually clinically subtle, inconspicuous and difficult to recognize from the normal behaviors of the inter-ictal periods or physiological phenomena, making accurate recognition and treatment challenging for clinicians in the busy NICU environment.

**FACT:** Seizures are more common in the neonatal period than in any other time in life – as high as 57.5/1000 in < 1500g and 2.8/1000 in 2500-3999g.

**FACT:** With moderate-to-severe hypoxic-ischemic encephalopathy (HIE), the incidence of seizures is > 50%.

**FACT:** Term infants with seizures have very poor outcomes, with a 20% fatality rate in the neonatal period. Survivors have a 28% - 35% risk for severe neurodevelopmental disability and a 20% - 50% risk for epilepsy.

**RecogniZe the hospital challenge**

**FACT:** Neurological resources to identify at-risk infants, increasing the potential for poor outcomes.

**FACT:** Conventional EEG (cEEG) using greater than 10 electrodes and concurrent video recording is the gold standard for bedside monitoring. However, cEEG is labor-intensive to both set up and interpret, and interpretation is rarely available in real time.

**FACT:** Unidentified and untreated neonatal seizures can lead to long-term impairment or death.
RecogniZe the solution

The Olympic Brainz Monitor’s RecogniZe option assists clinicians in identifying possible seizure activity:

- Developed for the NICU for ease of use by NICU staff
- Helps ease identification and validation of suspected seizure activity in the raw EEG signal
- Helps identify when to bring in neurology

Monitoring for seizures with limited-channel amplitude-integrated EEG (aEEG) can be accurately interpreted. It also compares favorably with cEEG, and aligns with a general trend toward reduced seizure burden. It has been shown that the anatomical regions conventionally used for aEEG electrode placement yield a high sensitivity (78%) for electrical seizure detection.

A trend is growing in many health care facilities to adopt the CFM Olympic Brainz Monitor with the sole intention of improving their NICU staff’s ability to identify subclinical seizures.

References: