stroke, general/combined neurology and neurosurgery, post-cardiac arrest, medicine/general critical illness, and patients in the emergency department. A total of 9092 adult patients were studied. 14 studies demonstrated good inter-observer reliability of the FOUR score. 9 studies demonstrated prognostic value of the FOUR score in predicting mortality and functional outcomes. 31 studies demonstrated equivalency or superiority of the FOUR score compared to GCS in prediction of mortality and functional outcomes. Similar results were seen for the pediatric population. **Conclusions:** The FOUR score has been shown to be a useful outcome predictor in many patients with depressed level of consciousness. It displays good inter-rater reliability among physicians and nurses.

**P.060**

Utility analysis of continuous video EEG (cvEEG) monitoring during the treatment of hypoxic ischemic encephalopathy (HIE) in the NICU

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**Background:** Therapeutic hypothermia (TH) improves the outcome in HIE but cvEEG is vital to detect any seizures that occur. Unfortunately, the costs associated with cvEEG can make it impractical. We studied outcomes in TH with the objective of optimizing the length of cvEEG required. **Methods:** Term infants with HIE were treated with 72 h of TH followed by 6 h of rewarming. cvEEG reports were quantified (background, sharp transients, seizures) and compared with pre and post-cooling variables to determine whether risk stratification was possible. **Results:** 25/78 infants had seizures during the TH, however, most seizures occurred early, with 7 infants seizing prior to cooling and 15 having their first seizure within 24 h. Only 3 infants had their first seizure between 24-48 h and none were recorded after. Novel seizures after 24 h were brief and did not require treatment. EEG variables such as frequent sharp transients and first seizures within 24 h were correlated with MRI abnormalities. **Conclusions:** For the majority of infants undergoing TH, 24 h of cvEEG may be sufficient with few infants requiring longer than 48 h. A combination of clinical variables (abnormal neurological exam) and EEG traits (frequency of discharges, seizures) can help to decide on the likelihood of seizures and length of EEG recording needed.

**P.061**

Reliability of EEG reactivity in asessment of comatose patients under standardized protocol


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**Background:** Electroencephalography (EEG) is a routine clinical tool that is used to evaluate thalamocortical function in comatose patients. The presence or absence of reactivity in background EEG patterns to afferent stimuli is believed to be an important indicator of clinical outcome. At present, there are no guidelines or standardized testing protocols for the assessment of EEG reactivity in critically ill patients. Moreover, the inter-rater reliability of subjectively identifying