

Supplementary Online Content

Rossetti AO, Schindler K, Sutter R, et al. Continuous vs routine electroencephalogram in critically ill adults with altered consciousness and no recent seizure: a randomized clinical trial. Published online July 13, 2020. *JAMA Neurol*. doi:10.1001/jamaneurol.2020.2264

eTable 1. Exploratory analysis of primary outcome (mortality at 6 months) and functional outcomes

eFigure 1. Study design

eFigure 2. Cerebral performance categories (CPC) and modified Rankin Scales (mRS) at 6 months in the two intervention groups

This supplementary material has been provided by the authors to give readers additional information about their work.

Table S1: Exploratory analysis of primary outcome (mortality at 6 months) and functional outcomes across cEEG versus rEEG in patients with and without hypoxic-ischemic encephalopathy. (Poisson regression models for categorical variables [mortality] and linear regression models for continuous variables [Δ mRS and CPC]). Bold values are significant.

| Patients with hypoxic-ischemic encephalopathy | rEEG (n=52) | cEEG (n=60) | Crude | | | Adjusted for CCI | | |
|--|-----------------|-----------------|-------------------|------------|--------------|-------------------|------------|--------------|
| | Number | Number | Relative risk | 95% CI | p-value | Relative risk | 95% CI | p-value |
| Mortality at 6 months | 29 (55.8%) | 39 (65.0%) | 1.16 | 0.86-1.58 | 0.327 | 1.28 | 0.94-1.75 | 0.122 |
| | median (range) | median (range) | Regression coeff. | 95% CI | p-value | Regression coeff. | 95% CI | p-value |
| Δ mRS at 6 Months (survivors) | 1 (-1 – 4) | 1 (-1 – 4) | 0.39 | -0.45-1.22 | 0.355 | 0.34 | -0.52-1.20 | 0.432 |
| CPC at 6 Months (survivors) | 1 (1-3) | 2 (1-3) | 0.15 | -0.37-0.68 | 0.560 | 0.21 | -0.32-0.75 | 0.428 |
| Patients without hypoxic-ischemic encephalopathy | rEEG (n=130) | cEEG (n=122) | Crude | | | Adjusted for CCI | | |
| | Number | Number | Relative risk | 95% CI | p-value | Relative risk | 95% CI | p-value |
| Mortality at 6 months | 59 (45.4%) | 50 (41.0%) | 0.90 | 0.68-1.20 | 0.483 | 0.90 | 0.68-1.20 | 0.466 |
| | median (range) | median (range) | Regression coeff. | 95% CI | p-value | Regression coeff. | 95% CI | p-value |
| Δ mRS at 6 Months (survivors) | 1 (-5 – 4) | 1 (-3 – 5) | 0.73 | 0.10-1.36 | 0.023 | 0.74 | 0.12-1.35 | 0.019 |
| CPC at 6 Months (survivors) | 2 (1-4) | 2 (1-4) | 0.06 | -0.24-0.35 | 0.710 | 0.06 | -0.24-0.35 | 0.706 |

Legend: rEEG = routine electroencephalography; cEEG = continuous electroencephalography; CCI = Charlson comorbidity index; CI = confidence interval; CPC = Cerebral Performance Category; Δ mRS = evolution of modified Rankin Scale between pre-hospitalization and at 6 months.

Figure S1: Study design. cEEG=continuous EEG; rEEG=routine EEG.

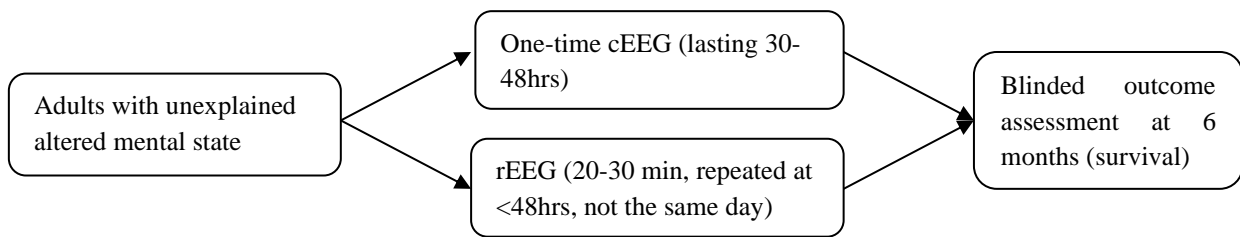


Figure S2: Cerebral performance categories (CPC) and modified Rankin Scales (mRS) at 6 months in the two intervention groups.

