

PROPEA STEPCARE is a continuation of the PROPEA3 study that suggested that the restitution of electroencephalogram (EEG) slow wave activity (SWA), particularly in the early phase, may have prognostic potential in predicting favourable functional outcome after OHCA. Patients randomised to STEPCARE will be included, unless they have known allergy to adhesive material and/or injured skin in the fronto-temporal area preventing use of the adhesive electrode, or significant pre-existing neurological comorbidity. Based on results of the PROPEA3 study, we will investigate whether the time for reaching a predefined threshold value of C-Trend index after ROSC predicts a favourable functional outcome and whether not reaching a certain SWA threshold within twelve hours from ROSC predicts unfavourable functional outcome. Functional outcome is defined using modified Rankin Scale (mRS), dichotomised to favourable (mRS 1-3) or unfavourable (mRS 4-6). SWA is represented by C-Trend Index, a numerical index value based on SWA, provided by a commercially available medical device software. EEG recordings will be performed with a disposable self-adhesive frontal electrode and wireless device. Clinical and research personnel will be blinded to the C-Trend Index, but in centres using continuous EEG (cEEG) for routine monitoring, cEEG is visible on the device. We will compare the prognostic accuracy of C-Trend Index with blinded retrospective visual analysis of continuous EEG as gold standard. We will also assess whether difference in treatment protocols carried out as a part of STEPCARE trial modify the performance of the variable used in prediction. The data collection will be carried out in selected centres participating the STEPCARE trial.

For questions regarding the PROPEA STEPCARE please contact:

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