**Extended follow-up**

The main objective of the extended follow-up substudy is to provide detailed information on participant outcome in relation to potential neuroprotection and improvements in recovery for different targets of sedation, temperature, and blood pressure management after cardiac arrest at 6 and 12 months.

The primary outcome is cognitive function (*MoCA*) with the aim to provide increased information for the estimation of brain dysfunction. Secondary outcomes will explore differences in the survivors’ level of disability in relation to disability (*WHODAS 2.0 36 item*) and their experience of fatigue (*MFIS*) and mental health (*HADS,* PCL-5). Exploratory outcomes include mental processing speed, (*SDMT*), physical function (*Jamar hand dynamometer, TST*), life satisfaction and return to work.

A secondary objective of the extended follow up substudy is to describe the caregiver’s experience in relation to burden (*ZBI*), mental health (*HADS, PCL-5*), and life impact (*WHODAS 2.0 12 item*) of caring for and living with a cardiac arrest survivor at 6 and 12 months.

The extended follow up study is an optional part of the STEPCARE trial, but all survivors at those site that take part in the extended follow up substudy will be eligible for inclusion. We aim to include at least 600 survivors, which will have a power of >0.98 to identify pre-specified effects for all the included outcomes.

The extended follow up requires a face-to-face interview, performed either by a clinical visit or a web based digital meeting, by a trained blinded outcome assessor. At 6 months the extended follow up is performed together with the mandatory STEPCARE follow up (*mRS, EQ-5D-5L, EQ-VAS*).

Co-chairs for the extended follow-up are Gisela Lilja (Sweden), Naomi Hammond (Australia) and Marjaana Tiainen (Finland). The follow up team also consist of Katarina Heimburg (Sweden) and Frances Bass (Australia).

**Abbreviations:** *MoCA*=Montreal Cognitive Assessment; *WHODAS*=World Health Organization Disability Assessment Schedule; *MFIS*= Modified Fatigue Impact Scale; *HADS*= Hospital Anxiety and Depression Scale; *PCL-5*= Post-Traumatic Stress Disorders Checklist updated for DSM-5; *SDMT*= Symbol Digit Modalities Test; *TST*= Timed Stands Test; *ZBI*= Zarit Burden Interview; *mRS*= modified Rankin Scale; *EQ-5D-5L*= Euroqol 5 dimensions 5 level response version; *EQ-VAS*= Euroqol Visual Analogue Scale