

## ETM/353 - Non-invasive Brain Stimulation in Stroke Patients

Hemispatial neglect is a debilitating consequence of stroke, where sufferers are unable to recognise one side of space, with the result that they collide with objects, and fail to acknowledge their affected side. Around 80% of stroke patients with damage to the right half of their brain suffer from neglect. It is the strongest independent predictor of poor functional recovery from stroke and significantly lengthens hospital stay. Rehabilitation strategies that address neglect have not generally been feasible to be applied in a clinical setting, and have failed to show impact on the patients' ability to function in activities of everyday life. We therefore propose a pilot evaluation of **two clinically viable treatments** (action training and non-invasive brain stimulation (TDCS)) applied separately or in combination, and a control task in a prospective randomised open blinded end-point (PROBE) trial. We will assess long term outcomes after 2 weeks of interventions and at 6 months follow up, both in terms of neglect recovery, activities of daily living, and quality of life. The findings are anticipated to provide data to inform the design of a definitive, confirmatory, pragmatic, multicentre randomised, controlled trial.