PREP2: Tailoring upper limb rehabilitation after stroke

Recovery of motor function is important for regaining independence after stroke, but difficult to predict for individual patients. Recovery of upper limb function is particularly important for regaining independence, but can be difficult to predict based on clinical judgement alone. We have developed the PREP2, which is an efficient, accurate, and accessible algorithm for predicting upper limb outcomes for individual stroke patients. The algorithm sequentially combines clinical and neurophysiological biomarkers to make predictions and guide rehabilitation. This approach is more accurate than clinical judgement, and improves rehabilitation efficiency. PREP2 has been translated into clinical practice, and is also useful for stratification of patients in clinical trials of upper limb rehabilitation after stroke. This presentation will provide a step-by-step guide to using PREP2 in clinical practice, and describe the potential benefits of doing so.