

# INPLASY

## Acupuncture combined with rehabilitation robot to treat post-stroke motor dysfunction

INPLASY2024120122

doi: 10.37766/inplasy2024.12.0122

Received: 30 December 2024

Published: 30 December 2024

Xiong, BW; Xu, WY; Wu, SB; Jiang, T.

### Corresponding author:

BoWen Xiong

475077042@qq.com

### Author Affiliation:

Anhui University of Chinese Medicine.

### ADMINISTRATIVE INFORMATION

**Support** - The First Batch of Provincial Chinese Medicine Advantageous Characteristic Specialty Project.

**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY2024120122

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 December 2024 and was last updated on 30 December 2024.

### INTRODUCTION

**Review question / Objective** The aim of this study was to examine the status of the difference in the efficacy of acupuncture combined with rehabilitation robotics in the treatment of post-stroke motor dysfunction compared to acupuncture alone in the treatment of post-stroke motor dysfunction or rehabilitation robotics alone in the treatment of post-stroke motor dysfunction, and the study method chosen was a randomized controlled trial (RCT).

**Condition being studied** This study has a clear research question and purpose, sets strict inclusion and exclusion criteria, will conduct data extraction and quality assessment, assesses statistical homogeneity, selects appropriate data synthesis methods, conducts sensitivity and bias analyses, uses professional statistical software, develops a comprehensive literature search strategy, considers language and publication bias,

follows ethical considerations, ensures personnel qualifications, and follows transparency and reporting standards to ensure the quality of the study and the reliability of the results. standards to ensure the quality of the study and the reliability of the results.

### METHODS

**Participant or population** Patients with post-stroke motor dysfunction.

**Intervention** Acupuncture combined with rehabilitation robot therapy.

**Comparator** Acupuncture therapy alone or rehabilitation robotics alone.

**Study designs to be included** Randomized controlled trials.

---

**Eligibility criteria** UK National Stroke Guidelines 2023 and Chinese Guidelines for the Diagnosis and Management of Acute Ischemic Stroke 2023.

**Information sources** Web of Science, PubMed, Cochrane Library, EMBASE, Wanfang Data Knowledge Service Platform (Wanfang), Wipu Information Chinese Journal Service Platform (VIP), China Journal Full Text Database (CNKI) and China Biomedical Literature Database (CBM).

**Main outcome(s)** Overall clinical efficacy, activities of daily living, functional walking, balance function, limb motor function.

**Quality assessment / Risk of bias analysis** Cochrane tool.

**Strategy of data synthesis** Meta-analysis was performed using RevMan 5.3 software to produce forest plots for statistical description and funnel plots for publication bias assessment. Measurement data were analyzed using weighted mean difference (MD), count data were analyzed using odds ratio (OR), and each effect size was expressed by 95% confidence interval (CI). For the test of heterogeneity, if  $P < 50\%$ , it suggests the existence of significant heterogeneity, and a random-effects model was used; if  $P \geq 0.10$  and  $I^2 < 50\%$ , it suggests no significant heterogeneity.

**Subgroup analysis** Divided into two subgroups according to upper and lower extremities.

**Sensitivity analysis** Sensitivity analyses were performed using RevMan software, which responded to the sensitivity of this study by looking at how the effect sizes changed after deleting one of the studies.

**Country(ies) involved** China.

**Keywords** Acupuncture; rehabilitation robot; stroke; motor dysfunction.

#### **Contributions of each author**

Author 1 - Bowen Xiong.  
Email: 475077042@qq.com  
Author 2 - WenYuan Xu.  
Author 3 - ShengBin Wu.  
Author 4 - Tao Jiang.