

# INPLASY PROTOCOL

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**Review Stage at time of this submission:** The review has not yet started.

**Conflicts of interest:**  
None declared.

## INTRODUCTION

**Review question / Objective:** The results of this systematic review will provide the latest high-quality evidence for the use of external treatment of TCM in the management of CFS.

## The effects of external treatment of traditional Chinese medicine for chronic fatigue syndrome: a protocol for systematic review and meta-analysis

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**Review question / Objective:** The results of this systematic review will provide the latest high-quality evidence for the use of external treatment of TCM in the management of CFS.

**Condition being studied:** Chronic fatigue syndrome (CFS) is a worldwide disease of unclear pathogenesis, causing profound, prolonged chronic disabling fatigue, being accompanied by the symptoms of unrefreshing sleep, post exertion malaise (PEM), cognitive impairment, and many other nonspecific symptoms.[1] The previous studies reported that it could reduce the patients' quality of life and make a substantial influence on the individual and the family, such as placing a financial burden. The study published recently reported that the prevalence of CFS in the population is between 0.01% to 7.62%. Compared with data in the previous studies, it is obvious that the prevalence rate of CFS has an increasing trend, more and more individuals are suffer from this illness, which makes it becoming one of the most serious public health issues in the world.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 07 July 2022 and was last updated on 07 July 2022 (registration number INPLASY202270033).

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## METHODS

**Participant or population:** Participants diagnosed as CFS.

**Intervention:** The experimental group applied the external treatment of TCM, including Tuina, Qigong, acupuncture, moxibustion, cupping, acupoint application.

**Comparator:** In control group, the participants received the drug therapy, special medical care, behavioural therapy, graded exercise therapy, physical therapy and other therapies without the external treatment of TCM therapy.

**Study designs to be included:** RCTs of the effects of external treatment of TCM for CFS patients will be included.

**Eligibility criteria:** Those diagnosed with CFS by one of the following diagnostic criteria will be eligible for participation: The Oxford criteria (1991), Centers for Disease Control and Prevention (1994), Canadian Consensus Criteria for ME/CFS (2003), International Consensus Criteria for ME (2011), and Institute of Medicine (2015), NICE Clinical Guidelines for CFS/ME (2021).

**Information sources:** The PubMed, Web of Science, Embase, Cochrane Library, Wanfang Database, Chinese National Knowledge Infrastructure, Technology Periodical Database, Chinese Science

Citation Database from their inception to July 2022 will be searched.

**Main outcome(s):** The primary outcome is evaluated by the following scales: Chalder Fatigue Scale, Fatigue Scale-14, Multidimensional Fatigue Inventory-20, Fatigue Severity Scale.

**Quality assessment / Risk of bias analysis:** The Grades of Recommendations Assessment, Development and Evaluation system will be applied to evaluate the quality of merged data. There will be four grades of evidence quality: high, moderate, low, and very low quality.

**Strategy of data synthesis:** We will extract data in this meta-analysis from eligible RCTs by using Review Manager version 5.3 software (The Nordic Cochrane Centre, Copenhagen, Denmark). The standardized mean deviations and 95% confidence interval will be calculated for continuous data. To measure the result of binary classification and express the accuracy of the estimation, the risk ratio values and the 95% confidence interval will be calculated.

**Subgroup analysis:** We will conduct subgroup analyses based on variations in the duration and frequency of CFS, type and duration of external treatment of TCM.

**Sensitivity analysis:** We will use sensitivity analysis to evaluate the validity and robustness of the meta-analysis results.

**Country(ies) involved:** China.

**Keywords:** chronic fatigue syndrome, external treatment, traditional Chinese medicine, meta-analysis, systematic review.

### Contributions of each author:

Author 1 - Jun Ren - The author drafted the manuscript, and work out the research strategy, and contributed to the development of conceptualization.

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