

# INPLASY PROTOCOL

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

**Conflicts of interest:**  
None declared.

## Efficacy of Acupuncture in treatment of Temporomandibular joint disorders: A systematic review and meta-analysis of randomized, sham-controlled trials

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**Review question / Objective:** P : Patients with temporomandibular joint disorders; I : Acupuncture; C : Sham acupuncture and routine therapy; O : VAS (visual analog scale) and MMO (maximum mouth opening).

**Condition being studied:** Several randomized controlled trials have published in recent years. However, there is no new meta-analysis articles evaluating the efficacy of acupuncture for temporomandibular joint disorders in the past 5 years. In addition, we aim to compare the prognosis of verum acupuncture with sham acupuncture for TMD.

**Information sources:** Electronic databases (Pubmed, Cochrane, ClinicalTrial), contact with authors, trialregisters.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 01 May 2022 and was last updated on 28 May 2022 (registration number INPLASY202250158).

### INTRODUCTION

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## METHODS

**Participant or population:** Patients with temporomandibular joint disorders.

**Intervention:** Acupuncture.

**Comparator:** Sham acupuncture and routine therapy.

**Study designs to be included:** Randomized controlled trial.

**Eligibility criteria:** Inclusion criteria : Patients with temporomandibular joint disorders, Acupuncture; Exclusion criteria : Other TCM technique, Multiple treatment or control groups, Diagnostic standard of TMD before 1996, Not available data.

**Information sources:** Electronic databases (Pubmed, Cochrane, ClinicalTrial), contact with authors, trialregisters.

**Main outcome(s):** VAS (visual analog scale) and MMO (maximum mouth opening).

**Quality assessment / Risk of bias analysis:** The methodological quality based on the Cochrane risk of bias.

**Strategy of data synthesis:** We analyzed the relative risk for dichotomous data and standardized mean difference (SMD) for continuous data with 95% confidence interval (CI). RR or SMD with 95% CI were calculated using Comprehensive Meta Analysis V3.

**Subgroup analysis:** 1. Needle maintenance time in / beyond 20 minutes; 2. Therapeutic efficacy with / without specific acupoints; 3. Whether sham acupuncture pierce the skin or not

**Sensitivity analysis:** In order to avoid the protocol violation, we follow the process of PRISMA.

**Language:** English.

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

**Keywords:** Acupuncture, Temporomandibular joint disorder, deqi, maximum mouth opening (MMO).

**Contributions of each author:**

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