# INPLASY PROTOCOL

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Conflicts of interest: None declared.

### INTRODUCTION

**Review question / Objective:** The systematic review, meta-analysis and RCTs of acupuncture and moxibustion in the treatment of allergic rhinitis were graded,

and a high-level evidence mapping was made. Finally, the efficacy of acupuncture and moxibustion in the treatment of allergic rhinitis was evaluated by network metaanalysis.

Efficacy of acupuncture and moxibustion in the treatment of allergic rhinitis: a protocol for evidence mapping and network meta-analysis based on GRADE

Lu, L<sup>1</sup>; Xiong, J<sup>2</sup>; Chen, J<sup>3</sup>.

**Review question / Objective:** The systematic review, metaanalysis and RCTs of acupuncture and moxibustion in the treatment of allergic rhinitis were graded, and a high-level evidence mapping was made. Finally, the efficacy of acupuncture and moxibustion in the treatment of allergic rhinitis was evaluated by network meta-analysis.

Information sources: Allergic rhinitis is a non infectious chronic inflammatory disease of nasal mucosa mediated by Ig e after allergen exposure in atopic individuals. The main clinical features are paroxysmal sneezing, nasal congestion, clear water like runny nose and nasal itching. At the same time, it may be accompanied by eye symptoms such as redness, itching, tears, conjunctival congestion and so on.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 08 December 2021 and was last updated on 08 December 2021 (registration number INPLASY2021120041).

Condition being studied: Allergic rhinitis is a non infectious chronic inflammatory disease of nasal mucosa mediated by Ig e after allergen exposure in atopic individuals. The main clinical features are paroxysmal sneezing, nasal congestion, clear water like runny nose and nasal itching. At the same time, it may be accompanied by eye symptoms such as redness, itching, tears, conjunctival congestion and so on.

### **METHODS**

Participant or population: Patients with allergic rhinitis.

Intervention: Acupuncture and moxibustion.

Comparator: Western medicine, placebo, sham electroacupuncture, exercise, no treatment. Studies that compared acupuncture plus another therapy with the same another therapy alone will be tolerated.

Study designs to be included: We will include systematic review, meta-analysis and randomized controlled trials (RCTs) involving acupuncture and moxibustion in the treatment of allergic rhinitis.

Eligibility criteria: Systematic review, metaanalysis and randomized controlled trials (RCTs) involving acupuncture and moxibustion in the treatment of allergic rhinitis.Intervention measures: All forms of acupuncture and moxibustion.

Information sources: Describe all intended information sources (e.g., electronic databases, contact with authors, trial registers, or grey literature. Pubmed, Embase, Cochrane Library, Chinese Biomedical Literatures Database(CBM), China National Knowledge Infrastructure (CNKI), WangFang Database (WF), Chinese.

Main outcome(s): Describe the outcomes of the review including all relevant details such as timing and effect measures. Quality assessment / Risk of bias analysis: Included randomised studies will be assessed for risk of bias by two independent raters(Lunbin Lu and Jun Chen) using the Cochrane Collaboration's tool for assessing risk of bias in randomised trials. Any disagreements will be resolved through discussion or consultation with a third reviewer(Jun Xiong).

Strategy of data synthesis: Data synthesis will be conducted with RevMan V.5.4 software provided by the Cochrane Collaboration. Before data meta-analysis, we measure the heterogeneity with a standard test. Depending on the level of heterogeneity, those studies with high heterogeneity (p>0.10) will use fixed-effect model. We will use the RR for dichotomous data and SMD for continuous data and mean difference with 95% CIs. Those studies with low heterogeneity (p=0.10), we use the random-effect model. Subgroup or sensitivity analysis will be performed if necessary. We will use qualitative analysis if there is excessive data heterogeneity.

Subgroup analysis: If the necessary data are available, subgroup analysis will be carried out according to different factors as follows: 1. Control interventions (eg, sham electro-acupuncture, no treatment, oth er TCM treatment or non-TCM treatment). 2. Type of acupuncture and moxibustion (eg, needle acupuncture, auricular acupuncture, heat-sensitive moxibustion, thunder fire miraculous moxa roll, warm needling moxibustion, suspended moxibustion or mild moxibustion).

Sensitivity analysis: To assess the influence of each individual study, leave-one-out sensitivity analysis was performed iteratively by removing one study at a time to confirm that the findings were not influenced by any single study.

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

Keywords: Evidence mapping; network meta-analysis; acupuncture and moxibustion; allergic rhinitis; Grade; protocol.

## **Contributions of each author:**

Author 1 - Lunbin Lu - The author drafted and improved the manuscript. Author 2 - Jun Xiong - Revise this protocol;

search strategy.

Author 3 - Jun Chen - Data collection; analysis of results.