

# INPLASY PROTOCOL

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

**Conflicts of interest:**  
None declared.

## Effectiveness and safety of acupoint application for chronic obstructive pulmonary disease: A protocol for an updated systematic review and meta-analysis

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**Review question / Objective:** The purpose of this systematic review and meta-analysis is to evaluate the effectiveness and safety of acupoint application combined with conventional western medicine interventions in the treatment of COPD in remission stage.

**Condition being studied:** Acute exacerbation is a primary cause of repeated hospitalization and death in chronic obstructive pulmonary disease (COPD) patients. Previous researches have reported that acupoint application can be applied to the treatment of COPD.

**Information sources:** PubMed, EMBASE, Cochrane Central Register of Controlled Trials, Web of Science, China National Knowledge Infrastructure, WangFang Database, Chinese Science and Technology Periodical Database, SinoMed.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 April 2021 and was last updated on 14 April 2021 (registration number INPLASY202140080).

### INTRODUCTION

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repeated hospitalization and death in chronic obstructive pulmonary disease (COPD) patients. Previous researches have reported that acupoint application can be applied to the treatment of COPD.

## METHODS

**Participant or population:** The participants should be diagnosed with COPD in stable phase.

**Intervention:** Acupoint application combined with conventional western medicine therapeutic measure should be applied in the treatment group.

**Comparator:** The same conventional western medicine therapeutic measure must be used in the comparator arm.

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

**Eligibility criteria:** Randomized controlled trials of acupoint application combined with routine western medicine interventions in the treatment of COPD in remission stage.

**Information sources:** PubMed, EMBASE, Cochrane Central Register of Controlled Trials, Web of Science, China National Knowledge Infrastructure, WangFang Database, Chinese Science and Technology Periodical Database, SinoMed.

**Main outcome(s):** Clinical effective rate; TCM symptom score; quality of life (COPD assessment test, St. George's respiratory questionnaire, chronic respiratory questionnaire, etc.); dyspnea (borg scale, visual analog dyspnea scale, modified british medical research council respiratory difficulty questionnaire, etc.); exercise capacity (6-minute walking test, shuttle walking test, etc.); lung function (FEV<sub>1</sub>, FVC, FEV<sub>1</sub>/FVC, TLC, RV, etc.); frequency of acute exacerbation; adverse effects.

**Quality assessment / Risk of bias analysis:** We will use the Cochrane risk of bias assessment tool version 2.0 (RoB 2.0) to assess the methodological quality of RCTs.

**Strategy of data synthesis:** The Stata13.1 software (Stata-Corp LP, College Station TX77845) will be used for the meta-analysis. When the p-value of Q-test > 0.1 and I<sup>2</sup> < 50%, a fixed effects model will be applied; otherwise, a random-effects model will be used.

**Subgroup analysis:** Where heterogeneity is significant, subgroup analysis will be implemented based on specified effect modifiers as follows: different interventions, controls, publication year, sample size, course of treatment, publication language, risk of bias.

**Sensitivity analysis:** According to the risk of bias assessment results, we will eliminate the low-quality literature to carry out sensitivity analysis to judge the robustness of the conclusion.

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

**Keywords:** acupoint application; chronic obstructive pulmonary disease; meta analysis, systematic review.

### Contributions of each author:

Author 1 - Haoyang Zhang.

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Author 3 - Lijian Pang.

Author 4 - Xiaodong Lv.

Author 5 - Weidong Zheng.