# INPLASY PROTOCOL

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Support: TCM Evidence-based Capacity.

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

**Conflicts of interest:** None.

# Comparative efficacy and safety of Traditional Chinese Patent Medicine in the treatment of Mycoplasma pneumoniae pneumonia (MPP) in children - A protocol for systematic review and meta analysis

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Review question / Objective: Comparative efficacy and safety of traditional Chinese patent medicine in the treatment of mycoplasma pneumoniae in children.

Condition being studied: We will comprehensively search the following electronic databases, including Cochrane Library, PubMed, Web of Science, Embase, ClinicalTrials, CnKI database, Viper database, Wanfang Database, and China Biomedical Literature database, etc., and the basic retrieval strategies will be adjusted according to different databases. The Chinese search words were "Chinese patent medicine", "Mycoplasma infection", "Mycoplasma pneumonia", "Mycoplasma pneumoniae infection", "Children mycoplasma pneumoniae", "randomized controlled trial". "Traditional Chinese patent Medicine", "TCPM", "mycoplasma Infection", "mycoplasmal pneumonia", "mycoplasma pneumoniae Infection", "Randomized Controlled". The retrieval time is from the establishment of each database to October 2020.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 28 October 2020 and was last updated on 13 November 2020 (registration number INPLASY2020100108).

### INTRODUCTION

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electronic databases, including Cochrane Library, PubMed, Web of Science, Embase, ClinicalTrials, CnKI database, Viper database, Wanfang Database, and China Biomedical Literature database, etc., and the basic retrieval strategies will be adjusted according to different databases. The Chinese search words were "Chinese patent medicine", "Mycoplasma infection",

"Mycoplasma pneumonia", "Mycoplasma pneumoniae infection", "Children mycoplasma pneumoniae", "randomized controlled trial". "Traditional Chinese patent Medicine", "TCPM", "mycoplasma Infection", "mycoplasmal pneumonia", "mycoplasma pneumoniae Infection", "mycoplasma pneumoniae in Children", "Randomized Controlled". The retrieval time is from the establishment of each database to October 2020.

### **METHODS**

Participant or population: MPP diagnosis in children will follow the guidelines for community-acquired Pneumonia in Children 24. Children between the ages of 1 and 15 years are not restricted to race, sex or disease severity and length of illness.

Intervention: MPP diagnosis in children will follow guidelines for community-acquired pneumonia in children. Children between the ages of 1 and 15 years are not restricted to race, sex or disease severity and length of illness.

Comparator: The main outcome measures were antipyretic duration, relief or disappearance of cough, and disappearance of rhonchus in lung. The secondary outcome measures were the length of hospital stay, the time for lung X-ray showing the regression of inflammatory infiltration, and the total effective rate.

Study designs to be included: We will include all RCTs published in Chinese or English using Proprietary Chinese medicines to treat MPP in children, but exclude studies that are not RCTs, including meta-analyses, non-clinical studies, lack of data or poorly designed studies. The articles were searched according to the pre-made retrieval strategy, and the articles retrieved from the above database were imported into endnote X9 literature management software for classification.

Information sources: We will comprehensively search the following electronic databases, including Cochrane

Library, PubMed, Web of Science, Embase, ClinicalTrials, CnKI database, Viper database, Wanfang Database, and China Biomedical Literature database, etc., and the basic retrieval strategies will be adjusted according to different databases. The Chinese search words were "Chinese patent medicine", "Mycoplasma infection", "Mycoplasma pneumonia", "Mycoplasma pneumoniae infection", "Children mycoplasma pneumoniae", "randomized controlled trial". "Traditional Chinese patent Medicine", "TCPM", "mycoplasma Infection", "mycoplasmal pneumonia", "mycoplasma pneumoniae Infection", "mycoplasma pneumoniae in Children", "Randomized Controlled". The retrieval time is from the establishment of each database to October 2020.

Main outcome(s): The main outcome measures were antipyretic duration, relief or disappearance of cough, and disappearance of rhonchus in lung. The secondary outcome measures were the length of hospital stay, the time for lung X-ray showing the regression of inflammatory infiltration, and the total effective rate. The included literature covers one or more of the above key indicators.

## Quality assessment / Risk of bias analysis:

The quality of each trial was assessed by two researchers using the Risk of bias tool recommended by the Cochrane Library. In the evaluation, factors such as the sufficiency of random sequence generation, the existence of allocation concealment, the adoption of blind method, the adoption of blind method in the result evaluation, the integrity of the result data, the existence of selective reporting and conflict of interest shall be considered.

Strategy of data synthesis: Two researchers independently screened the literature according to the inclusion and exclusion criteria, and cross-checked. In case of differences, they discussed and negotiated with the third researcher to make a decision.

Subgroup analysis: If there is sufficient evidence, we will conduct a subgroup

analysis to explore the source of heterogeneity. The following aspects will be used: age, surgical treatment or not, and course of treatment.

Sensibility analysis: Sensitivity analysis was conducted with symptom improvement rate to evaluate clinical similarity and methodology of included studies to determine the reliability of the results of this study.

Country(ies) involved: China.

Keywords: Chinese patent medicine (TCPM), mycoplasma pneumoniae in children, network meta-analysis, study protocol.

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

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