

# INPLASY PROTOCOL

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**Review Stage at time of this submission:** Preliminary searches.

**Conflicts of interest:**  
None declared.

## INTRODUCTION

**Review question / Objective:** This study aimed to conduct a meta-analysis of acupoint injection in the treatment of Chronic atrophic gastritis to clarify its efficacy and safety.

## The efficacy and safety of acupoint injection for chronic atrophic gastritis: A protocol for systematic review and meta-analysis

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**Review question / Objective:** This study aimed to conduct a meta-analysis of acupoint injection in the treatment of Chronic atrophic gastritis to clarify its efficacy and safety. **Condition being studied:** Chronic atrophic gastritis (CAG) is one of the common digestive system diseases, which is considered a precursor of gastric cancer. With the change in modern dietary structure, the incidence of CAG is higher all over the world. Currently, accumulated evidences have shown that acupoint injection is beneficial for the clinical treatment of CAG. However, there is nowadays no systematic review to assess this therapy of acupoint injection. Therefore, this study aimed to conduct a meta-analysis of acupoint injection in the treatment of CAG to clarify its efficacy and safety.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 28 September 2021 and was last updated on 28 September 2021 (registration number INPLASY202190105).

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evidences have shown that acupoint injection is beneficial for the clinical treatment of CAG. However, there is nowadays no systematic review to assess this therapy of acupoint injection. Therefore, this study aimed to conduct a meta-analysis of acupoint injection in the treatment of CAG to clarify its efficacy and safety.

## METHODS

**Participant or population:** Patients suffering from Chronic atrophic gastritis.

**Intervention:** Interventions of the experimental group will include simple acupoint injection and acupoint injection combined with other basic and conventional treatment. However, the type of injected medication will not be restricted.

**Comparator:** The control group received treatment with Western medication, Chinese herbal medication, placebo, acupuncture, tuina, and so on, or even with no treatment, will be included.

**Study designs to be included:** This review will include randomized controlled trials (RCTs) on acupoint injection for CAG published in Chinese and English language.

**Eligibility criteria:** Studies will include patients of any age groups who have been diagnosed with CAG by gastroscopy or histopathological examination.

**Information sources:** Randomized controlled trials (RCTs) of acupoint injection in the treatment of CAG were retrieved from PubMed, Embase, Web of Science, Cochrane Library, China National Knowledge Infrastructure (CNKI), Wan Fang Database (Wang Fang), Chinese Biomedical Literature Database (CBM), VIP Database for Chinese Technical Periodicals (VIP), Medline, and Clinical Trial Register (CTR). We will consider articles published in English or Chinese between database initiation and September 2021.

**Main outcome(s):** The main outcomes of this review are clinical effective rate, comparison of therapeutic effects under gastroscopy, and comparison of curative effect of pathological tissue.

**Quality assessment / Risk of bias analysis:** We will assess the following areas of the studies: sequence generation, allocation concealment, blinding of participants and assessors, blinding of outcome assessment, incomplete outcome data, selective outcome reporting, and other sources of bias. Funnel plots will be created to assess the reporting bias. Dissymmetry funnel plot indicates high risk of reporting bias, while symmetric funnel plot indicates low risk.

**Strategy of data synthesis:** Review Manager software (Revman, Version 5.3 for Windows) was used to perform the meta-analysis. The Chi-Squared test and I<sup>2</sup> statistic was used to assess the heterogeneity of literature according to the values of P and I<sup>2</sup>. If the homogeneity was low ( $P > 0.1$ ;  $I^2 < 50\%$ ), the fixed-effect model was utilized for the meta-analysis; otherwise, the random effect model was selected. However, when the heterogeneity is particularly high, we will first try to find the cause of its occurrence, and then decide the final meta-analysis model to choose.

**Subgroup analysis:** When there was substantial heterogeneity in the included studies, the subgroup analysis will be conducted according to factors such as condition of disease, course of disease, acupoints of injection, injected drug, intervention frequency, age, gender, region, year, sample size, and other factors.

**Sensitivity analysis:** Sensitivity analysis is also one of the indispensable methods to deal with heterogeneity. The sensitivity analysis, we will conduct, is to explore the impact of trial bias risk on preliminary results. If there is significant statistical heterogeneity, sensitivity analysis will exclude low-quality studies, and repeat meta-analysis based on sample size and

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insufficient data to assess quality and robustness.

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

**Keywords:** acupoint injection, chronic atrophic gastritis, systematic review, meta-analysis, protocol.

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