

# INPLASY PROTOCOL

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**Conflicts of interest:**  
None declared.

## Topical anticholinergic medications for primary hyperhidrosis: A protocol for systematic review and meta- analysis

Gao, D<sup>1</sup>; Shi, Y<sup>2</sup>.

**Review question / Objective:** Whether topical anticholinergic agents are more effective and tolerated in primary hyperhidrosis.

**Condition being studied:** Primary hyperhidrosis (PHH) is a chronic condition characterized by excessive sweating.

**Information sources:** PubMed, the Cochrane Library, Embase, the Web of Science, and the Cochrane Central Register of Controlled Trials.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 February 2022 and was last updated on 22 February 2022 (registration number INPLASY202220093).

### INTRODUCTION

**Review question / Objective:** Whether topical anticholinergic agents are more effective and tolerated in primary hyperhidrosis.

**Condition being studied:** Primary hyperhidrosis (PHH) is a chronic condition characterized by excessive sweating.

### METHODS

**Participant or population:** Participants with a diagnosis of primary hyperhidrosis based on focal, visible, excessive sweating of at least 6 months in duration without apparent cause.

**Intervention:** topical anticholinergics such as glycopyrronium tosylate.

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**Comparator:** Placebo.

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

**Study designs to be included:** Randomized controlled trials (RCTs) of PHH treated by topical anticholinergic drugs will be included.

**Keywords:** Primary hyperhidrosis, Topical anticholinergics.

**Eligibility criteria:** Participants with a diagnosis of primary hyperhidrosis based on focal, visible, excessive sweating of at least 6 months in duration without apparent cause, RCTs comparing topical anticholinergics such as glycopyrronium tosylate.

**Contributions of each author:**

Author 1 - Dongyang Gao.

Author 2 - Yuanyuan Shi.

**Information sources:** PubMed, the Cochrane Library, Embase, the Web of Science, and the Cochrane Central Register of Controlled Trials.

**Main outcome(s):** Severity of hyperhidrosis measured quantitatively (e.g. gravimetry, evaporimeter, and minor starch-iodine test).

**Quality assessment / Risk of bias analysis:** Two investigators will independently assess the risk of bias in the included RCTs using the Cochrane Risk Assessment of Bias Tool.

**Strategy of data synthesis:** We will use Review Manager 5.4 software (Copenhagen: The Nordic Cochrane Centre, The Cochrane Collaboration) for data synthesis and statistical analysis. For dichotomous variables, odds ratio (OR) or relative risk (RR), 95% confidence interval (CI), and P-value were used. For continuous variables, mean difference (MD) or Std mean difference (SMD), 95% confidence interval (CI), and P-value were used.

**Subgroup analysis:** Subgroup analysis based on different drugs will be conducted to explore the source of heterogeneity when there are sufficient extraction data and significant heterogeneity.

**Sensitivity analysis:** At the same time, if possible, we will conduct sensitivity analysis by eliminating studies with a high risk of bias.