# INPLASY PROTOCOL

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**Support:** **Have financial sources.**

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

**Conflicts of interest:**
**None declared.**

# Effect of intravaginal electrical stimulation for overactive bladder (OAB): A protocol for meta-analysis

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**Review question / Objective:** **To investigate the effect of intravaginal electrical stimulation for overactive bladder (OAB).**
**Condition being studied:** **Electrical stimulation is mainly divided into transcutaneous tibial electrical stimulation, Pudendal Neuromodulation, and transvaginal electrical stimulation. A meta-analysis of transcutaneous electrical tibial stimulation for the treatment of OAB has been demonstrated, and this study aimed to explore the safety and efficacy of transvaginal electrical stimulation for the treatment of OAB.**
**Eligibility criteria:** **1.Types of studies：All articles published from the inception date of each database will be included, without language and publication type limitations 2.Types of participants：The study will include trials that recruited participants who met diagnostic criteria or had OAB symptoms associated with specific diseases 3.Types of interventions：Intravaginal electrical stimulation refers to a method of stimulating in vaginal , including Intravaginal electrical stimulation, Vaginal electrical stimulation, Transvaginal Electrical Stimulation, vaginal pelvic floor electrical stimulation, plus bladder training, pelvic floor muscle training, medicine . Other methods such as sham**

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 April 2022 and was last updated on 13 April 2022 (registration number INPLASY202240074).

## INTRODUCTION

**Review question / Objective:** **To investigate the effect of intravaginal electrical stimulation for overactive bladder (OAB).**

**Rationale:** **Electrical stimulation for overactive bladder becomes a new treatment.**

**Condition being studied:** Electrical stimulation is mainly divided into transcutaneous tibial electrical stimulation, Pudendal Neuromodulation, and transvaginal electrical stimulation. A meta-analysis of transcutaneous electrical tibial stimulation for the treatment of OAB has been demonstrated, and this study aimed to explore the safety and efficacy of transvaginal electrical stimulation for the treatment of OAB.

## METHODS

**Search strategy:** #1 (Overactive bladder [MeSH Terms]) OR (Overactive Bladder OR Overactive Urinary Bladder OR Overactive Detrusor OR Overactive Detrusor Function OR Bladder Overactivity OR Detrusor Overactivity OR Urinary Incontinence OR Urgency OR Urgency Urinary Incontinence OR Urgent Incontinence OR Urinary Urge Incontinence) #2Vaginal electrical stimulation OR VES OR Intravaginal Electrical Stimulation OR IVES OR Vaginal Electrotherapy OR Transvaginal Electrical Stimulation
#3 #1 AND #2.

**Participant or population:** Patients with oab.

**Intervention:** Intravaginal electrical stimulation or intravaginal electrical stimulation plus bt.

**Comparator:** Medicine or bt or sham.

**Study designs to be included:** Rct or prospective cohort study.

**Eligibility criteria:** 1.Types of studies: All articles published from the inception date of each database will be included, without language and publication type limitations2.Types of participants: The study will include trials that recruited participants who met diagnostic criteria or had OAB symptoms associated with specific diseases3.Types of interventions: Intravaginal electrical stimulation refers to a method of stimulating in vaginal, including Intravaginal electrical stimulation, Vaginal electrical stimulation, Transvaginal Electrical Stimulation, vaginal pelvic floor electrical stimulation, plus bladder training, pelvic floor muscle training, medicine . Other methods such as sham.

**Information sources:** web of science, pubmed, cochrane, embase.

**Main outcome(s):** Voiding diary.

**Additional outcome(s):** QOL; Side effect.

**Data management:** Two investigators (MZX and YGZ) will extract data independently from the selected report or study, and complete a data extraction form.When the reported data are insufficient, we will contact the author for more information. Any disagreement will be resolved by a discussion between the two authors and any further disagreement will be arbitrated by the third author (PGM).

**Quality assessment / Risk of bias analysis:** The authors (MXZ and YGZ) will use the Cochrane Collaboration's bias risk assessment tool to assess the risk of bias for all included studies. We will assess the risk of bias in sequence generation; allocation sequence concealment; the blinding of participants and staff, and outcome assessors; incomplete outcome reporting; selective reporting of results; and other sources of deviation. This review uses L, U and H as the key to these assessments, where L (low) indicates a lower risk of bias, U (unclear) indicates an uncertain risk of bias and H (high) indicates a higher risk of bias. If inconsistent results occur, the final decision will be made by the third author (ZX). The information contained in the study on the risk of bias assessment will be summarised in tabular form, and the results and impacts will be critically discussed. If theinformation is not clear, we will attempt to contact the author. For duplicate articles, only the original will be used.

**Strategy of data synthesis:** RevMan V.5.3 (Copenhagen: The Nordic Cochrane Centre, The Cochrane Collaboration, 2014)

will be used for data synthesis. The use of a fixed-effects or random-effects model will be determined based on the heterogeneity level.the random-effects model will be used for data synthesis if significant heterogeneity (the I2 value is not <50%) is observed. If there is considerable heterogeneity in the trials, a meta-analysis will not be performed.

**Subgroup analysis:** Subgroup analyses will be performed based on the heterogeneity of the control group type(medicine, bladder training or pelvic floor muscle training).

**Sensitivity analysis:** To test the robustness of the review conclusions, a sensitivity analysis will be performed for the primary outcome according to the following criteria: sample size, heterogeneity quality and statistical model (random-effects or fixed-effects model).

**Language:** English.

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

**Other relevant information:** TSA and meta-regression analysis will be included.

**Keywords:** vaginal electrical stimulation, overactive bladder, meta-analysis.

**Dissemination plans:** Through peer-review and academic journal.

**Contributions of each author:**

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