## INPLASY PROTOCOL

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# Clinical Evidence and Literature Quality Evaluation of External Treatment of Traditional Chinese medicine combined with Antidepressant Chemicals in the Adjunctive Treatment of Depression

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Review question / Objective: The efficacy and safety of clinical evidence of multiple TCM external therapy combined with antidepressant chemical drugs in the treatment of depression were evaluated by Bayesian network meta-analysis, and the literature quality was evaluated, and the probability ranking was conducted according to the measurement results.

Condition being studied: Depression is a kind of disease with low mood or mood as the main performance, accompanied by varying degrees of cognitive and behavioral changes, but also accompanied by mental symptoms such as hallucinations, delusions. Some patients with depression are at risk of selfinjury, suicide or even death. As a typical psychosomatic disease, depression will not only harm the physical health of patients, but also cause irreparable harm to their mental health and even interpersonal relationship. Studies have shown that nearly 20% of people suffer from depression at some point in their lives. The number of people suffering from depression has climbed to 350 million worldwide, and the range of people affected by depressive symptoms is expanding. The disease has become a serious mental health problem of human beings.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 12 June 2022 and was last updated on 12 June 2022 (registration number INPLASY202260053).

### **INTRODUCTION**

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#### **METHODS**

Participant or population: Patients who have been diagnosed with depression.

Intervention: The experimental group was treated with ATC and TCM external treatment based on the control group.

Comparator: The control group received ATC or TCM external treatment.

Study designs to be included: RCTs or QRCTs.

Eligibility criteria: Study typeRandomized Controlled Trials (RCTs) or Quasi-Randomized Control Trials (QRCTs) of acupuncture combined with massage for VACS were retrieved. Study subjects. The subjects were patients with a clear diagnosis of VACS, with no restrictions on nationality, ethnicity, age, gender, or course of the disease. Patients with VACS need to meet any accepted diagnostic criteria and a clear literature source.

Information sources: Computer searches of VIP,WAN FANG DATA, CBM,CNKI and The Web of Science EMbase, Cochrane library, PubMed databases to obtain published randomized controlled trials (RCTs) or quasi-randomized control trials (QRCTs) for depression, retrieved from the inception to June 10, 2022. The search terms include depression, acupuncture, electric acupuncture, warm needling, Dynamic muscle needle, fire needle, needle-knife, blade needle, bleeding, moxibustion.

Main outcome(s): Total response rate, HAMD score.

Additional outcome(s): SDS score, incidence of adverse reactions.

Quality assessment / Risk of bias analysis: The selected literatures were evaluated using the Cochrane risk of bias assessment tool, and the literature quality evaluation results were visualized using Review Manager 5.4 software.

Strategy of data synthesis: The Network graph and funnel plot were drawn using STATA 16.0 MP (Stata Corporation, College Station, TX, USA). Bayesian network metaanalysis was performed using R 4.4.1 software based on Markov Chain - Monte Carlo (MCMC), with the number of iterations set to 100000 and the number of annealing set to 50000. Four Markov chains were fitted. Iterative convergence was determined by calculating potential scale reduction factors (PSRF), and PSRF achieves satisfactory convergence when limited to 1 to 1.05, otherwise, the number of iterations will be increased. If the closed-loop is present in the network map, the node-splitting method would be used to detect the inconsistency of direct and indirect comparison; p> 0.05 chose the consistency model. Final matrix was generated. Binary variables used the mean difference (OR) as the effect size, and the continuous variables used the mean difference (MD) as the effect size. Figures were embellished using the Adobe Photoshop CC.

Subgroup analysis: If necessary, subgroup analysis will be performed according to literature.

Sensitivity analysis: If necessary, sensitivity analysis will be conducted according to the specific literature.

Country(ies) involved: China.

Keywords: Depression; Clinical evidence; Literature quality evaluation; Randomized controlled trials; Non-drug therapy of TCM; Bayesian network meta-analysis.

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