INPLASY PROTOCOL

To cite: Du et al. Systematic review and meta-analysis of the efficacy and safety of Panax notoginseng saponins in the prevention of lower-extremity deep venous thrombosis. Inplasy protocol 202330032. doi: 10.37766/inplasy2023.3.0032

Received: 09 March 2023

Published: 09 March 2023

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Support: **National Natural Science Foundation of China.**

Review Stage at time of this submission: **Completed but not published.**

Conflicts of interest:
None declared.

Systematic review and meta-analysis of the efficacy and safety of Panax notoginseng saponins in the prevention of lower-extremity deep venous thrombosis

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Review question / Objective: **P: Participants must be individuals diagnosed with LEDVT. I: Panax Notoginseng Saponions (PNS) alone or PNS combined with routine western medicine treatment; C: Western medicine. O: The Incidence of LEDVT.**
Condition being studied: **The lower-extremity deep vein thrombosis (LEDVT) is a condition that is common in postoperative and intensive care patients. It is caused by impaired venous reflux, endothelial dysfunction and ahypercoagulability.**
Eligibility criteria: **All randomized controlled trials (RCTs) exploring the clinical outcomes of PNS alone or PNS combined with western medicine versus western medicine with LEDVTwere includedAll randomized controlled trials (RCTs) exploring the clinical outcomes of Zishen Yutai Pill plus western medicine versus western medicine with TM in woman were included.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 March 2023 and was last updated on 09 March 2023 (registration number INPLASY202330032).

INTRODUCTION

Review question / Objective: **P: Participants must be individuals diagnosed with LEDVT. I: Panax Notoginseng Saponions (PNS) alone or PNS combined with routine western medicine treatment; C: Western medicine. O: The Incidence of LEDVT.**

Condition being studied: **The lower-extremity deep vein thrombosis (LEDVT) is a condition that is common in postoperative and intensive care patients. It is caused by impaired venous reflux,**

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endothelial dysfunction and ahypercoagulability.

METHODS

Search strategy: The following subject words and key words were searched, including "Panax Notoginseng Saponions," "Panax notoginseng extract," "xuesaitong injection," "fufang xueshuantong, " "Xueshuantong," "Xuesaitong," "prevention," "prevention," "lower-extremity deep venous thrombosis," "randomized controlled trials," "clinical trials," "RCT," "DVT," "lower-extremity deep venous thrombosis," "deep venous thrombosis," and "prevent."

Participant or population: The original study clearly pointed out that the included patients were in line with the relevant diagnosis of DVT; the DVT occured in the lower extremities. patients after orthopedic, gynecologic, and other surgical procedures; gender and age were notlimited.

Intervention: Panax Notoginseng Saponions alone or Panax Notoginseng Saponions combined with routine western medicine treatmentPanax Notoginseng Saponions.

Comparator: Western medicine.

Study designs to be included: Randomized controlled trials.

Eligibility criteria: All randomized controlled trials (RCTs) exploring the clinical outcomes of PNS alone or PNS combined with western medicine versus western medicine with LEDVTwere includedAll randomized controlled trials (RCTs) exploring the clinical outcomes of Zishen Yutai Pill plus western medicine versus western medicine with TM in woman were included.

Information sources: Foreign-language databases are limited to Pubmed, the Cochrane library, MEDLINE, and EMBASE; Chinese databases are limited to the China Knowledge Network, the Wanfang database, the VIP database, and the Chinese biomedical literature database; and trial registries are limited to the China Clinical Trial Registration Center and the WHO international clinical trial registration platform.

Main outcome(s): The Incidence of LEDVT was considered as the primary outcome.

Additional outcome(s): The d-dimer (Dmurd), activated partial thromboplastin time (APTT), fibrinogen (FIB), and plasma viscosity (PV). Safety indicators: adverse reactions were considered as the additional outcomes.

Quality assessment / Risk of bias analysis: The bias risk assessment method recommended by the Cochrane Assistance Network was used to assess methodological quality. This was conducted independently by two researchers and included the following six aspects (seven items): selection bias (generation of random sequences, allocation concealment); implementation bias (blind method for researchers and participants); measurement bias (blind method for evaluation of study outcome indicators); loss of follow-up bias (the integrity of outcome data); publication bias (selective reporting of research results); and other biases (other sources of bias).

Strategy of data synthesis: Data from individual RCTs were combined in the meta-analysis using the random effects model. Continuous variables use mean difference (MD) or standardized mean difference (SMD) as the effect quantity, and rank variables use odds ratio (OR) or relative risk (RR) as the effect quantity. 95% confidence interval (CI) is calculated for both. the chi-squared test and I2 values was used to assess statistical heterogeneity, with significance levels of P > 0.1 and I2>50%, respectively.

Subgroup analysis: Subgroup analyses stratified by APTT and D-D.

Sensitivity analysis: The results of meta analysis are recombined and analyzed by

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changing the statistical model, changing the amount of effect, removing individual studies, clipping and other methods to evaluate the stability of the research results.

Country(ies) involved: China.

Keywords: Panax notoginseng saponins; lower-extremity deep venous thrombosis; randomized controlled trial; systematic review.

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Weijing Fan and Guobin Liu designed the study. Yuqing Du and Renyan Huang drafted the manuscript. Huimin Lu and Yaoqing Sun collected literatures. Huimin Lu and Xuhong Wang performed extracted the datas and input the datas. Weijing Fan and Weian Yuan performed the statistical analysis. Guobin Liu revised the manuscript.Weijing.

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