

INPLASY PROTOCOL

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Risk factors for pulmonary embolism in ICU patients: a protocol for systematic review and meta analysis

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Review Stage at time of this submission: Piloting of the study selection process.

Conflicts of interest:

None declared.

Review question / Objective: What are the risk factors of pulmonary embolism in ICU patients? How high are the risks?
Condition being studied: Pulmonary embolism: often occurs in patients with venous thrombosis, long-term bed rest, and surgery, etc.

Eligibility criteria: Eligibility criteria for the review are based on the PICOS framework. We will include studies that meet the following criteria: (1) Patients diagnosed with pulmonary embolism; (2) Predictors and prognostic factors; (3) Cohort study and case control study

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 May 2021 and was last updated on 26 June 2021 (registration number INPLASY202150105).

INTRODUCTION

Review question / Objective: What are the risk factors of pulmonary embolism in ICU patients? How high are the risks?

Condition being studied: Pulmonary embolism: often occurs in patients with

venous thrombosis, long-term bed rest, and surgery, etc.

METHODS

Participant or population: Patients in ICU.

Intervention: Risk factors: venous thrombosis, long-term bed rest, and surgery, etc.

Comparator: Without these risk factors.

Study designs to be included: Cohort study or case control study.

Eligibility criteria: Eligibility criteria for the review are based on the PICOS framework. We will include studies that meet the following criteria: (1) Patients diagnosed with pulmonary embolism; (2) Predictors and prognostic factors; (3) Cohort study and case control study.

Information sources: A systematic search will be conducted using online electronic databases, including :PubMed, Cochrane Library, Embase, CINAHL, Web of Science, China Journal Fulltext Database(CNKI), Wanfang Database, VIP Database. Retrieval time will be from their inception until May 31, 2021.

Main outcome(s): Pulmonary embolism or not.

Quality assessment / Risk of bias analysis: Two reviewers independently evaluated the quality of the included studies according to the Newcastle-Ottawa Scale and evaluated the risk of bias and applicability of the models using the Prediction model Risk of Bias Assessment Tool.

Strategy of data synthesis: A meta-analysis will be summarized for the quantitative synthesis, using RevMan 5.3. The effect sizes from the meta-analysis will be presented as odds ratios(OR), or relative risks(RR), depending on the data reported by the authors.

Subgroup analysis: If possible, we will do some extra subgroup analyses according to the results of heterogeneity and inconsistency, such as race, region, etc.

Sensitivity analysis: If possible, we will do some extra Sensitivity analyses.

Language: English.

Country(ies) involved: China.

Keywords: Risk Factors; Pulmonary Embolism; Meta Analysis.

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