

INPLASY PROTOCOL

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Review Stage at time of this submission: Formal screening of search results against eligibility criteria.

Conflicts of interest: None.

Application of vitamin C in adult patients with sepsis: a meta-analysis of randomised controlled trials

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Review question / Objective: 1. Population: Adult patients with sepsis; 2. Intervention: vitamin C; 3. Control: Placebo; 4. Outcomes: mortality, ICU LOS, ventilator days, duration of vasopressor; 5. Study design: Randomised controlled trials (RCTs).

Condition being studied: Sepsis, Application of vitamin C in adult patients.

Information sources: We will search the PubMed, Embase, Cochrane, Web of Science and the Cochrane Central Register of clinical trials.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 26 April 2020 and was last updated on 26 April 2020 (registration number INPLASY202040186).

INTRODUCTION

Review question / Objective: 1. Population: Adult patients with sepsis; 2. Intervention: vitamin C; 3. Control: Placebo; 4. Outcomes: mortality, ICU LOS, ventilator days, duration of vasopressor; 5. Study design: Randomised controlled trials (RCTs)

Condition being studied: Sepsis, Application of vitamin C in adult patients.

METHODS

Participant or population: Adult patients with sepsis.

Intervention: Vitamin C.

Comparator: Placebo.

Study designs to be included: Randomised controlled trials (RCTs).

Eligibility criteria: Meet the PICOS.

Information sources: We will search the PubMed, Embase, Cochrane, Web of Science and the Cochrane Central Register of clinical trials.

Main outcome(s): Mortality.

Additional outcome(s): ICU LOS, ventilator days, duration of vasopressor.

Quality assessment / Risk of bias analysis: We will assess the risk of bias via the Cochrane Collaboration Tool.

Strategy of data synthesis: We will use Review Manager 5.3 software to combine aggregate data.

Subgroup analysis: 1. high risk vs low risk; 2. low dose of vitamin C vs high dose; 3. combined therapy vs monotherapy; 4. enteral vs intravenous.

Sensibility analysis: We will conduct a sensitivity analysis using STATA version 15.1.

Language: English.

Country(ies) involved: China.

Keywords: vitamin C, hydrocortisone, thiamine, sepsis, mortality, meta-analysis.

Contributions of each author:

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