# INPLASY PROTOCOL

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Support: None.

**Review Stage at time of this submission: Preliminary searches.** 

Conflicts of interest: None declared.

## The blood pressure targets in survivors of cardiac arrest : a systematic review and meta-analysis

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**Review question / Objective: We sought to conduct a systematic review and meta-analysis to evaluate the optimizing blood pressure targets in survivors of cardiac arrest.** 

Condition being studied: All cause death, severe bleeding, arrhythmia, renal replacement therapy, CPC score  $\geq$ 3, mRS score  $\geq$  4, the level of serum norepinephrine, neuron-specific enolase and troponin T.

Eligibility criteria: (1) Patients survivors of cardiac arrest. (2) Outcomes Indicators: All cause death, severe bleeding, arrhythmia, renal replacement therapy, CPC score  $\geq$ 3, mRS score  $\geq$  4, the level of serum norepinephrine, neuron-specific enolase and troponin T, including one.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 January 2023 and was last updated on 13 January 2023 (registration number INPLASY202310037).

\*Ying Xie, Yu Geng and Tong Gao have contributed equally to this work

### INTRODUCTION

**Review question / Objective:** We sought to conduct a systematic review and metaanalysis to evaluate the optimizing blood pressure targets in survivors of cardiac arrest. Condition being studied: All cause death, severe bleeding, arrhythmia, renal replacement therapy, CPC score  $\geq$ 3, mRS score  $\geq$  4, the level of serum norepinephrine, neuron-specific enolase and troponin T.

### **METHODS**

Participant or population: Patients survivors of cardiac arrest.

Intervention: Low or high blood pressure target management.

**Comparator:** Low or high blood pressure target management.

Study designs to be included: Study designs to be included: The search strategy was RCTs or Prospective observational studies.

Eligibility criteria: (1) Patients survivors of cardiac arrest. (2) Outcomes Indicators: All cause death, severe bleeding, arrhythmia, renal replacement therapy, CPC score  $\geq$ 3, mRS score  $\geq$  4, the level of serum norepinephrine, neuron-specific enolase and troponin T, including one.

Information sources: We will search the references in the included trials and personal files. We will request advice from experts in the field. In addition, we will search associated articles from meetings, and contacted the authors of included trials, if need.

Main outcome(s): All cause death.

Quality assessment / Risk of bias analysis: We evaluated the methodological quality of the individual studies using the Cochrane risk of bias tool for RCTs and using the Newcastle-Ottawa Scale for prospective observational studies.

**Strategy of data synthesis: We will consider** using the number of participants and deaths between different groups for analysis. Mortality may also be reported.

Subgroup analysis: When there is obvious heterogeneity, we will consider subgroup analysis. Of course, it may not be used in this meta-analysis.

Sensitivity analysis: We conducted sensitivity analyses to investigate the influence of a single study on the overall pooled estimate of each predefined outcome.

Country(ies) involved: China.

Keywords: cardiac arrest, blood pressure, targets.

### **Contributions of each author:**

Author 1 - Ying Xie. Author 2 - Yu Geng. Author 3 - Tong Gao. Author 4 - Siyuan Li. Author 5 - Lei Bi. Author 6 - Yintang Wang. Author 7 - Ping Zhang.