# INPLASY PROTOCOL

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### **Conflicts of interest:**

None declared.

# Application Secure Medical Imaging and value of blood perfusion index monitoring guidance in fluid resuscitation treatment of septic shock

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Review question / Objective: Have clinical value of perfusion index (PI) in septic shock patients with fluid resuscitation therapy?

Condition being studied: Sepsis patients.

Information sources: google, PubMed, CNKI, wed of science. Strategy of data synthesis: All data monitored were analyzed by IBM SPSS 25.0 software. Calculated data results are presented as mean  $\pm$  standard deviation (x  $\pm$  s). When the measurement data of the two groups were compared, independent sample t-test was used when they met the normal distribution, and parametric test was used when they did not meet the normal distribution. P < 0.05 was considered statistically significant.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 03 September 2022 and was last updated on 03 September 2022 (registration number INPLASY202290010).

## **INTRODUCTION**

Review question / Objective: Have clinical value of perfusion index (PI) in septic shock patients with fluid resuscitation therapy?

Condition being studied: septic shock.

#### **METHODS**

Participant or population: Sepsis patients (50 patients).

Intervention: fluid resuscitation therapy was guided by Pi according to the same parameters.

**Comparator: Normal patients.** 

Study designs to be included: Septic shock included patients.

Eligibility criteria: None- septic shock included patients.

Information sources: Google, PubMed, CNKI, wed of science.

Main outcome(s): 48 h after treatment, BLAC in the study group was significantly different from that in the control group (P < 0.05). There was no significant difference in Hb between the expermental group and the control group at 6 h, 24 h, and 48 h after treatment (P > 0.05). There was no significant difference between the study group and the control group at 6 h after treatment (P > 0.05), and there was a significant difference between the study group and the control group at 24 h and 48 h after treatment (P < 0.01).there was no significant difference in resuscitation fluid volume between the study group and the control group (P > 0.05).

Quality assessment / Risk of bias analysis: None.

Strategy of data synthesis: All data monitored were analyzed by IBM SPSS 25.0 software. Calculated data results are presented as mean  $\pm$  standard deviation (x  $\pm$  s). When the measurement data of the two groups were compared, independent sample t-test was used when they met the normal distribution, and parametric test was used when they did not meet the normal distribution. P < 0.05 was considered statistically significant.

Subgroup analysis: None.

Sensitivity analysis: None.

Country(ies) involved: China.

Keywords: perfusion index; septic shock; fluid resuscitation; cardiopulmonary index.

Contributions of each author:

Author 1 - Leging Lin.

Author 2 - Wei Cao. Author 3 - Baixue Yao. Author 4 - Wenxue Tang. Author 5 - Baiyong Wang. Author 6 - Bin Wang.