

# INPLASY

## Stress hyperglycemia ratio and the prognosis of heart failure: a systematic review and meta-analysis

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### ADMINISTRATIVE INFORMATION

**Support** - No support.

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

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202480033

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 06 August 2024 and was last updated on 06 August 2024.

## INTRODUCTION

**Review question / Objective** Heart failure significantly impairs the quality of life and lays economic and societal burdens on families and societies. The stress hyperglycemia ratio (SHR) is a biomarker may be related to HF. Accordingly, we aim to investigate whether there is independent association between the SHR and the prognosis of HF.

**Condition being studied** Heart failure is a clinical syndrome characterized by cardinal symptoms such as breathlessness, ankle swelling and fatigue, along with signs like elevated jugular venous pressure, pulmonary crackles. The prevalence of HF is 1-3% in general adult population, affecting more than 64 million people worldwide.

## METHODS

**Participant or population** Studies investigating the association of the SHR with the prognosis of HF will be addressed in the review.

**Intervention** None.

**Comparator** None.

**Study designs to be included** Cohort studies.

**Eligibility criteria** None.

**Information sources** Electronic databases.

**Main outcome(s)** All cause death, one-year mortality and death during hospitalization.

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**Quality assessment / Risk of bias analysis** The funnel plots will be used to show the publication bias.

**Strategy of data synthesis** RevMan (Version 5.3; Cochrane Collaboration, Oxford, UK) and R [version 4.3.1] software was used to carry out statistical analysis and systematic evaluation.

**Subgroup analysis** None.

**Sensitivity analysis** None.

**Country(ies) involved** China.

**Keywords** Heart failure, Stress hyperglycemia ratio, Systematic review, Meta-analysis.

**Contributions of each author**

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