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Naples Prognostic Score as a Prognosticr Marker fo Heart Failure: A Systematic Review and Meta-Analysis

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Huang, HB; Chen, L; Shi, JH; Hu, YG.

Corresponding author:
Hui-bin Huang

psyc6789@163.com

Author Affiliation:
Guang'anmen Hospital, China Academy of Chinese Medical Sciences.

ADMINISTRATIVE INFORMATION

Support - No support.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 16 July 2026 and was last updated on 16 July 2026.

INTRODUCTION

Review question / Objective The prognostic value of the Naples Prognostic Score (NPS) in heart failure (HF) lacks high-quality evidence. This systematic review and meta-analysis evaluated the efficacy of NPS in predicting mortality among HF patients to support clinical risk stratification.

Condition being studied The research team comes from the Department of Critical Care Medicine of a tertiary hospital in China, and all the team members have perfect clinical experience in critical care and resuscitation. Moreover, our team members have published more than 50 meta-analyses, which can guarantee the successful completion of the current research.

METHODS

Participant or population Adults (≥18 years) with heart failure.

Intervention Clear NPS measured timepoints.

Comparator NPS evaluated as either a continuous or categorical variable.

Study designs to be included Cohort, case-control, cross-sectional, or randomized controlled trials.

Eligibility criteria Eligibility was determined using the PICOS framework as described above.

Information sources PubMed, Embase, and the Cochrane Library, ClinicalTrials.gov and the WHO International Clinical Trials Registry Platform.

Main outcome(s) The association between NPS and all-cause mortality.

Quality assessment / Risk of bias analysis Methodological rigor was assessed using the Newcastle-Ottawa Scale (NOS) for cohort studies and AHA/CDC criteria for cross-sectional designs.

Strategy of data synthesis Meta-analysis.

Subgroup analysis Pre-specified subgroup analyses were conducted to investigate heterogeneity, stratified by: (1) Mortality type; (2) Sample size; (3) Age; (4) Data source; (5) Mortality risk; and (6) NPS cut-off values.

Sensitivity analysis Leave-one-out sensitivity analysis assessed robustness by sequentially omitting individual studies.

Country(ies) involved China.

Keywords Naples Prognostic Score; Heart Failure; Mortality; Meta-analysis.

Contributions of each author
Author 1 - Hui-bin Huang.
Author 2 - Lin Chen.
Author 3 - ia-Heng Shi.
Author 4 - Yan-Ge Hu.