

INPLASY

Comparison of Clinical Outcomes of Surgical and Endoscopic Treatment Strategies for Necrotizing Pancreatitis: A Systematic Review and Network Meta-analysis

INPLASY202460093

doi: 10.37766/inplasy2024.6.0093

Received: 24 June 2024

Published: 24 June 2024

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202460093

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 24 June 2024 and was last updated on 24 June 2024.

INTRODUCTION

Review question / Objective To find the preferred treatment strategies on the clinical outcomes for necrotizing pancreatitis (NP).

Condition being studied In patients with NP, the intervention is required in 40–63% of patients to improve the clinical outcomes, including the mortality and complications. Because the comprehensive comparison of clinical outcomes of surgical and endoscopic treatment strategies based on the randomized controlled trials (RCTs) remain limited, we therefore conduct this network meta-analysis to fill the knowledge gap.

METHODS

Search strategy We will search Pubmed, Embase and the Cochrane Register of Controlled Trials from database inception to June 27, 2024, to identify RCTs examining the outcomes from any

form of treatment strategies, including endoscopic and surgical interventions in the treatment for NP. To include all potential studies with different treatment interventions from the RCTs, we only use the term related to NP as the search strategy. We will also update the search if necessary.

Participant or population Adults over 18 years old diagnosed with NP.

Intervention Any kind of endoscopic or surgical interventions for NP.

Comparator Any kind of endoscopic or surgical interventions for NP.

Study designs to be included RCTs.

Eligibility criteria We will follow the PICOS format presented in the study protocol to select studies, and no other specific inclusion or exclusion criteria is defined.

Information sources Pubmed, Embase and the Cochrane Register of Controlled Trials. We will also review the reference lists of the included RCTs, published practice guidelines and review articles.

Main outcome(s) Either mortality (primary efficacy outcome) or major bleeding (primary safety outcome) post intervention of NP.

Additional outcome(s) Multi-organ failure and procedure-related fistula as the secondary effectiveness and safety outcomes, respectively.

Quality assessment / Risk of bias analysis We will assess the risk of bias of the included studies using version 2 of the Cochrane risk of bias tool for randomized trials (ROB 2).

Strategy of data synthesis The frequentist NMA with random-effects model was performed using the statistical package netmeta in R version 4.0.2 (R Foundation for Statistical Computing, Vienna, Austria).

Subgroup analysis None.

Sensitivity analysis We will exclude RCTs judged to be at high risk of bias to explore the putative associations of study quality with effectiveness and safety.

Country(ies) involved Taiwan.

Keywords Necrotizing Pancreatitis; Network Meta-analysis; Comparative Effectiveness; Endoscopy; Surgery.

Contributions of each author

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