INPLASY

The effect of intravascular imaging or physiology-guided coronary revascularization in patients with acute coronary syndrome

Corresponding author:
Jing-Chao Sun

15990657855@163.com

Author Affiliation:
Taizhou Municipal Hospital.

Sun, JC[1]; Liu, XY[2].

ADMINISTRATIVE INFORMATION

Support - Taizhou Municipal Hospital.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202420092

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 February 2024 and was last updated on 2 January 2025.

INTRODUCTION

Review question / Objective To compare intravascular imaging and physiology-guided coronary revascularization in patients with acute coronary syndrome.

Condition being studied In patients with acute coronary syndrome, the best strategy to guide coronary revascularization was unclear.

METHODS

Participant or population Patients with acute coronary syndrome.

Intervention Intravascular imaging or physiology-guided coronary revascularization.

Comparator Angiography-guided coronary intervention or culprit-only PCI.

Study designs to be included Randomized controlled trials.

Eligibility criteria 1) Patients: patients with acute coronary syndrome; 2) Intervention: intravascular imaging or physiology-guided coronary revascularization; 3) Control: angiography-guided coronary intervention or culprit-only PCI; 4) Outcome: MACE (a composite endpoint of death, MI, and repeat revascularization; 5) Study design: RCTs.

Information sources PubMed, Embase, Cochrane Central Register of Controlled Trials, ClinicalTrials.gov, and grey literature databases were searched.

Main outcome(s) Primary outcome: MACE (a composite endpoint of death, MI, and TLR).

Additional outcome(s) Secondary outcomes: the components of the primary outcome, cardiac death, TVR, stent thrombosis, and stroke.

Quality assessment / Risk of bias analysis ROB2 for individually randomized, parallel-group trials is applied to included studies.

Strategy of data synthesis All analyses for the pairwise meta-analysis were performed using STATA software for network meta-analysis. The RR value of each outcome and the corresponding 95% CI were calculated.

Subgroup analysis Subgroup analysis was performed based on the purpose of intravascular imaging or coronary physiology assessment.

Sensitivity analysis Sensitivity analysis was conducted by reclassifying the interventions as complete revascularization or culprit-only PCI.

Language restriction No language restriction.

Country(ies) involved China.

Keywords Acute coronary syndrome; Intravascular imaging; Coronary physiology; percutaneous coronary intervention.

Contributions of each author
Author 1 - Jing-Chao Sun.
Email: 15990657855@163.com
Author 2 - Xuan-Yan Liu.
Email: liuxuanyan1413@163.com