

INPLASY

The comparison of FFR-guided and angiography-guided or culprit-only coronary revascularization in patients with multivessel coronary disease: a systematic review and meta-analysis

INPLASY202440042

doi: 10.37766/inplasy2024.4.0042

Received: 08 April 2024

Published: 08 April 2024

Sun, JC; Liu, XY.

Corresponding author:

Jing-Chao Sun

5990657855@163.com

Author Affiliation:

Taizhou Municipal Hospital.

ADMINISTRATIVE INFORMATION

Support - NA.

Review Stage at time of this submission - Piloting of the study selection process.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202440042

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 08 April 2024 and was last updated on 08 April 2024.

INTRODUCTION

Review question / Objective To compare FFR-guided and angiography-guided or culprit-only revascularization in patients with multivessel coronary disease.

Condition being studied Complete revascularization was identified associated with lower cardiovascular events, but the benefit of FFR-guided coronary revascularization in patients with multivessel coronary disease.

METHODS

Participant or population Patients with multivessel coronary lesions.

Intervention FFR-guided complete revascularization.

Comparator Angiography-guided complete revascularization or culprit-only coronary revascularization.

Study designs to be included Randomized controlled trials.

Eligibility criteria 1) Patients: Patients with multivessel coronary lesions. 2) Intervention: FFR-guided complete revascularization. 3) Comparator: Angiography-guided complete revascularization or culprit-only coronary revascularization. 4) Outcomes: MACE(a composite endpoint of death, MI, TLR). 5) Design: RCTs.).

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

Main outcome(s) The primary outcome is MACE(a composite endpoint of death, MI, TLR).

Quality assessment / Risk of bias analysis

ROB2 for individually randomized, parallel-group trials is applied to included studies. GRADE assessment was used to evaluate the quality of outcomes.

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

Subgroup analysis Subgroup analysis was performed based on angiography-guided complete revascularization and culprit-only coronary revascularization. Subgroup analysis was also conducted based on the characteristics of patients and characteristics.

Sensitivity analysis Leave-one-out analysis was applied to the sensitivity analysis.

Language restriction No language restriction was applied.

Country(ies) involved China.

Keywords Multivessel coronary disease; Fractional flow reserve; Complete revascularization; 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