

INPLASY PROTOCOL

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Support: No.

Review Stage at time of this submission: Preliminary searches.

Conflicts of interest:
None.

INTRODUCTION

Review question / Objective: The aim of this meta-analysis is to systematically evaluate the efficacy and safety of routine upstream initiation vs deferred selective

Safety and efficacy of routine upstream initiation vs deferred selective use of Glycoprotein IIb/IIIa Inhibitors in Acute Coronary Syndromes: a meta-analysis

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Review question / Objective: The aim of this meta-analysis is to systematically evaluate the efficacy and safety of routine upstream initiation vs deferred selective use of Glycoprotein IIb/IIIa Inhibitors in Acute Coronary Syndromes.

Condition being studied: Current clinical practice allows tirofiban administration prior to angiography and permits its selective use in patients with stents or as a bailout response to thrombotic complications. Tirofiban is a small molecule GPI. Previous trials have recommended the early use of small GPIs in moderate- or high-risk NSTEMI-ACS. However, with the wide application of routine stenting and the use of clopidogrel preloading, the optimal timing of GPI administration to ACS patients undergoing PCI remains uncertain.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 December 2020 and was last updated on 09 December 2020 (registration number INPLASY2020120055).

use of Glycoprotein IIb/IIIa Inhibitors in Acute Coronary Syndromes.

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METHODS

Participant or population: Acute coronary syndrome undergoing percutaneous coronary intervention.

Intervention: Deferred provisional Glycoprotein IIb/IIIa Inhibitors treatment.

Comparator: Routine early Glycoprotein IIb/IIIa Inhibitors treatment.

Study designs to be included: Randomized controlled trials will be included.

Eligibility criteria: (1) Randomized treatment allocation, (2) comparison of early (routine upstream initiation use of Glycoprotein IIb/IIIa Inhibitors) versus late (deferred selective use of Glycoprotein IIb/IIIa Inhibitors) administration of Glycoprotein IIb/IIIa Inhibitors in patients undergoing PCI for ACS, (3) availability of complete clinical data.

Information sources: We will search articles in four electronic databases including PubMed, EMBASE, CNKI and Cochrane Library. All publications will be searched without any restriction of countries or articles type. Reference list of all selected articles will independently be screened to identify additional studies left out in the initial search.

Main outcome(s): The primary end point was death. Secondary end points were Major adverse cardiovascular events (MACE) and post-procedural Thrombolysis in Myocardial Infarction (TIMI) flow grade 2 or 3. We also analysed major and minor bleeding as the safety end point.

Quality assessment / Risk of bias analysis:

The bias risk of trials was assessed with the components recommended by the Cochrane Collaboration, including means for generating the randomization sequence, allocation concealment, blinding, incomplete outcome data, selective outcome reporting, and other sources of bias.

Strategy of data synthesis: Risk ratio (RR) with 95% confidence interval

(CI) was used to express the pooled effect of discontinuous variables. The summary estimates of continuous variables were presented as weighted mean differences with 95% CI. Heterogeneity was quantified using I^2 statistic, where $I^2 > 50\%$ represented between-study inconsistency. Fixed effects meta-analyses were conducted to pool these outcomes across the included trials when there was no between-study inconsistency, whereas the random-effects model was used if heterogeneity existed. Publication bias was evaluated using a funnel plot. Results were considered statistically significant at $P < 0.05$. Pooled analyses were performed with Review Manager 5.0 software.

Subgroup analysis: Unknown at this time.

Sensitivity analysis: Unknown at this time.

Language: No restriction.

Country(ies) involved: China.

Keywords: Glycoprotein IIb/IIIa Inhibitors; abciximab; eptifibatid; tirofiban; percutaneous coronary intervention; myocardial infarction; Acute Coronary Syndromes.

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