

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

Tirofiban efficacy and safety for percutaneous coronary intervention in patients with acute coronary syndrome: protocol for a systematic review and meta-analysis.

Authors

Gigliotti, Daniel Andries; Santos da Costa, Márcia Gisele; Santos, Ana Helena Silva; Correia, Marcelo G.; Santos, Marisa

VERSION 1 - REVIEW

Reviewer	1
Name	Hueb, Whady
Affiliation	Universidade Federal de Sao Paulo
Date	06-Nov-2024
COI	None

For the authors;

The study as presented presents inconsistencies in the content that must be considered. The introduction does not cover the basic requirements. Every introduction requires, at the beginning, everything that is known about the subject that “comes ahead”. Then, everything that is not known about the subject. Its contradictions or similarities. Finally, what the authors want to contribute. Therefore, the introduction must be redone. Likewise the bibliographical references. Most of the citations are not related to the subject to be addressed. They must be redone.

To Editor

Thank you for providing the opportunity to review the study titled “Tirofiban efficacy and safety for percutaneous coronary intervention: protocol for a systematic review and meta-analysis.” This is a preliminary draft of a study on a systematic review and meta-analysis of the use, safety and efficacy of Tirofiban in PCI. The study is well designed and follows the methodological standards of a meta-analysis. This reviewer sees no impediment to its approval.

Reviewer	2
Name	Sadeghipour, Parham
Affiliation	Rajaie Cardiovascular Medical and Research Center, Vascular Disease and Thrombosis Research Center
Date	15-Nov-2024
COI	None

Despite the recent systematic reviews with similar topic, the subject is still of potential interest. However, the current version of the protocol has many unclear methodological issues:

1. Outcome and related measure of effects in a systematic review should be selected, defined and used accurately. General such as “The outcome can use any measure of association (OR, RR or HR) and can be any of the following: 30 day, 6 months or 1 year mortality and recurrence of myocardial infarction in 30 days among patients treated with tirofiban compared to control subjects after the procedure, as these outcomes are clinically significant hard endpoints most associated with the drug effectiveness.” are unacceptable. The primary outcome is one of the main determinants which will differentiate your review compare to previous ones.
2. You firstly mentioned that the review will only collect RCTs and similar design studies. However, in the exclusion criteria only “Studies lacking follow-up after hospital discharge, case reports and editorials will be excluded.” This is different
3. I personally think “There will be no restrictions on language, or publication status” will not be operational.
4. All the different types of studies will be analyzed by the same quality assessment tolls?

Other minor issues in the abstract and Introduction as follow:

1. “Acute coronary syndrome”, as the main population should be added to the title
2. The following statement in the introduction “Cardiovascular diseases (CVD) represent the leading cause of mortality globally and impose a significant economic burden on healthcare systems, particularly in nations with single-payer systems such as Brazil and the UK”, might imply that the burden of CVD disease is augmented in single payer systems. Do we have evidence for that?
3. Present an appropriate reference for “Glycoprotein IIb/IIIa inhibitors, particularly tirofiban,...”
4. “By synthesizing data from randomized controlled trials (RCTs) and studies with similar designs ...” I suggest to avoid ambiguous statement, it is important to be specific about other designs?

5. Again avoid unclear statement “The search strategy will encompass a large number of databases, reducing the likelihood of publication bias and ensuring a comprehensive overview of evidence,” how a search strategy will avoid publication bias?

6. The introduction needs to be shortened and be more focused.

7. Acute coronary syndrome encompasses MI and unstable angina. Please indicate which guideline/consensus will be selected for the primary definition.

VERSION 1 - AUTHOR RESPONSE

Reviewer: 1

Dr. Whady Hueb, Universidade Federal de Sao Paulo

Comments to the Author:

For the authors;

The study as presented presents inconsistencies in the content that must be considered. The introduction does not cover the basic requirements. Every introduction requires, at the beginning, everything that is known about the subject that “comes ahead”. Then, everything that is not known about the subject. Its contradictions or similarities. Finally, what the authors want to contribute. Therefore, the introduction must be redone. Likewise, the bibliographical references. Most of the citations are not related to the subject to be addressed. They must be redone.

Response: Thank you for your insightful comments. We did rewrite the introduction contemplating the changes that you recommended.

Reviewer: 2

Dr. Parham Sadeghipour, Rajaie Cardiovascular Medical and Research Center

Comments to the Author:

Despite the recent systematic reviews with similar topic, the subject is still of potential interest. However, the current version of the protocol has many unclear methodological issues:

1. Outcome and related measure of effects in a systematic review should be selected, defined and used accurately. General such as “The outcome can use any measure of association (OR, RR or HR) and can be any of the following: 30 day, 6 months or 1 year mortality and recurrence of myocardial infarction in 30 days among patients treated with tirofiban compared to control subjects after the procedure, as these outcomes are clinically significant hard endpoints most associated with the drug effectiveness.” are unacceptable. The primary outcome is one of the main determinants which will differentiate your review compare to previous ones.

Response: Thank you for the contribution. The primary outcomes were defined as the risk ratio of 1 year mortality and 30-day recurrence of myocardial infarction between both groups.

2. You firstly mentioned that the review will only collect RCTs and similar design studies. However, in the exclusion criteria only “Studies lacking follow-up after hospital discharge, case reports and editorials will be excluded.” This is different

Response: We clarified the exclusion criteria.

3. I personally think “There will be no restrictions on language, or publication status” will not be operational.

Response: We will only consider studies written in English, Portuguese, French and Spanish. Thank you for your contribution.

4. All the different types of studies will be analyzed by the same quality assessment tools?

Response: Thank you for your comment. We have restricted the study designs to RCTs and cluster RCTs, which will be assessed for risk of bias using the ROB-2 tool, as it is specifically designed for assessing bias in randomized trials.

Other minor issues in the abstract and Introduction as follow:

1. “Acute coronary syndrome”, as the main population should be added to the title

Response: We added “Acute coronary syndrome” to the title.

2. The following statement in the introduction “Cardiovascular diseases (CVD) represent the leading cause of mortality globally and impose a significant economic burden on healthcare systems, particularly in nations with single-payer systems such as Brazil and the UK”, might imply that the burden of CVD disease is augmented in single payer systems. Do we have evidence for that?

Response: We removed this statement from the introduction.

3. Present an appropriate reference for “Glycoprotein IIb/IIIa inhibitors, particularly tirofiban,…”

Response: We removed this statement.

4. “By synthesizing data from randomized controlled trials (RCTs) and studies with similar designs …” I suggest to avoid ambiguous statement, it is important to be specific about other designs?

Response: We have refined the inclusion criteria to only include RCTs and Cluster RCTs.

5. Again avoid unclear statement “The search strategy will encompass a large number of databases, reducing the likelihood of publication bias and ensuring a comprehensive overview of evidence,” how a search strategy will avoid publication bias?

Response: We removed the unclear statement.

6. The introduction needs to be shortened and be more focused.

Response: We have made the recommended changes to the introduction.

7. Acute coronary syndrome encompasses MI and unstable angina. Please indicate which guideline/consensus will be selected for the primary definition.

Response: We have defined Acute Coronary Syndrome as outlined by the European Society of Cardiology, which includes both myocardial infarction and unstable angina.
