

## Peer Review Report

# Review Report on Risk of infective endocarditis following invasive dental procedures: a systematic review and meta-analysis

Systematic Review, Public Health Rev

Reviewer: Mark Dayer

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### EVALUATION

#### Q 1 Please summarize the main theme of the review.

The theme of the article is to look at the risk of developing IE after an invasive dental procedure. This has been controversial for many years, but recent analyses using "big data" have clarified the issue.

#### Q 2 Please highlight the limitations and strengths.

It's very well written; there is the odd error only - e.g. it should probably be selecting rather than select on line 147.

The search strategy is comprehensive and explained. The rationale is clearly explained. The selection of studies and extraction of data is well presented. The rationale and means of assessment for research quality is well thought through and presented. The organising of procedures is logical.

I am unable to comment on the statistical methodology.

The study has followed many of Cochrane's recommendations and was registered.

There are no overt conflicts of interest.

The inclusion and exclusion of studies is explained.

There is appropriate discussion of bias in the studies, and an appropriate sensitivity analysis.

The discussion is good.

The limitation is not from the analysis or the presentation, rather this makes the best of a series of studies whose methodology is flawed; the number of studies is small and the time period large. However, these weaknesses are acknowledged in the discussion.

The tables will need careful formatting...

#### Q 3 Please provide your detailed review report to the authors, structured in major and minor comments.

##### Minor

Line 145 - define AHRQ

Line 147 - selecting rather than select

Line 149 - reference ROBINS-I tool

Line 168 - define AHA

Line 221 - They consisted of rather than the majority consisting of

Line 225 - years is unnecessary

Line 312 - add "guidelines" after ESC

##### Major

It should be noted that although the finding of a link between IDP and IE, it does not mean that antibiotic prophylaxis works. That requires a different analysis, but it does support the concept that antibiotic prophylaxis could potentially reduce the risk of developing IE. That might need clarification around line 312.

Of note, as an author who has been cited by this research, and as someone who believes in the concept that IDPs result in IE, I may be biased when assessing this paper.

**PLEASE COMMENT**

**Q 4** Is the title appropriate, concise, attractive?

Yes

**Q 5** Are the keywords appropriate?

Yes

**Q 6** Is the English language of sufficient quality?

Yes

**Q 7** Is the quality of the figures and tables satisfactory?

No.

**Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes

**Q 9** Does this manuscript refer only to published data? (unpublished data is not allowed for Reviews)

Yes.

**Q 10** Does the manuscript cover the issue in an objective and analytical manner

Yes.

**Q 11** Was a review on the issue published in the past 12 months?

No.

**Q 12** Does the review have international or global implications?

Yes - it's a great review that supports the recent guidelines.

## QUALITY ASSESSMENT

**Q 13** → Quality of generalization and summary



**Q 14** → Significance to the field



**Q 15** → Interest to a general audience



**Q 16** → Quality of the writing



## REVISION LEVEL

**Q 17** → Please take a decision based on your comments:

Minor revisions.