

Impact of the Restoring Invisible & Abandoned Trials (RIAT) initiative on Cochrane evidence products

Background

The Restoring Invisible & Abandoned Trials (RIAT) initiative is an international effort to tackle bias in the way research is reported. Cochrane should pay attention to and benefit from this project.

Objectives

To identify the Cochrane evidence products directly concerned by two trials, one on **evolocumab** and the other on **plasma rich in growth factors (PRGF)**, recently restored through RIAT projects, and also explore potential changes to be implemented.

Methods

Two searches in the 'All Text' box of the Cochrane Library were performed on 15/02/2023 using "evolocumab" and "PRGF" as search terms.

All identified results were screened looking for Cochrane products including the original trials (**FOURIER** [doi:10.1056/NEJMoa1615664] and **BTI-01-EC/07/ART** [doi:10.1016/j.arthro.2012.05.011])

Following the restored version of both original trials by RIAT researchers (doi:10.1136/bmjopen-2021-060172; doi:10.1186/s13063-022-07049-3), some areas in need of updating were highlighted.

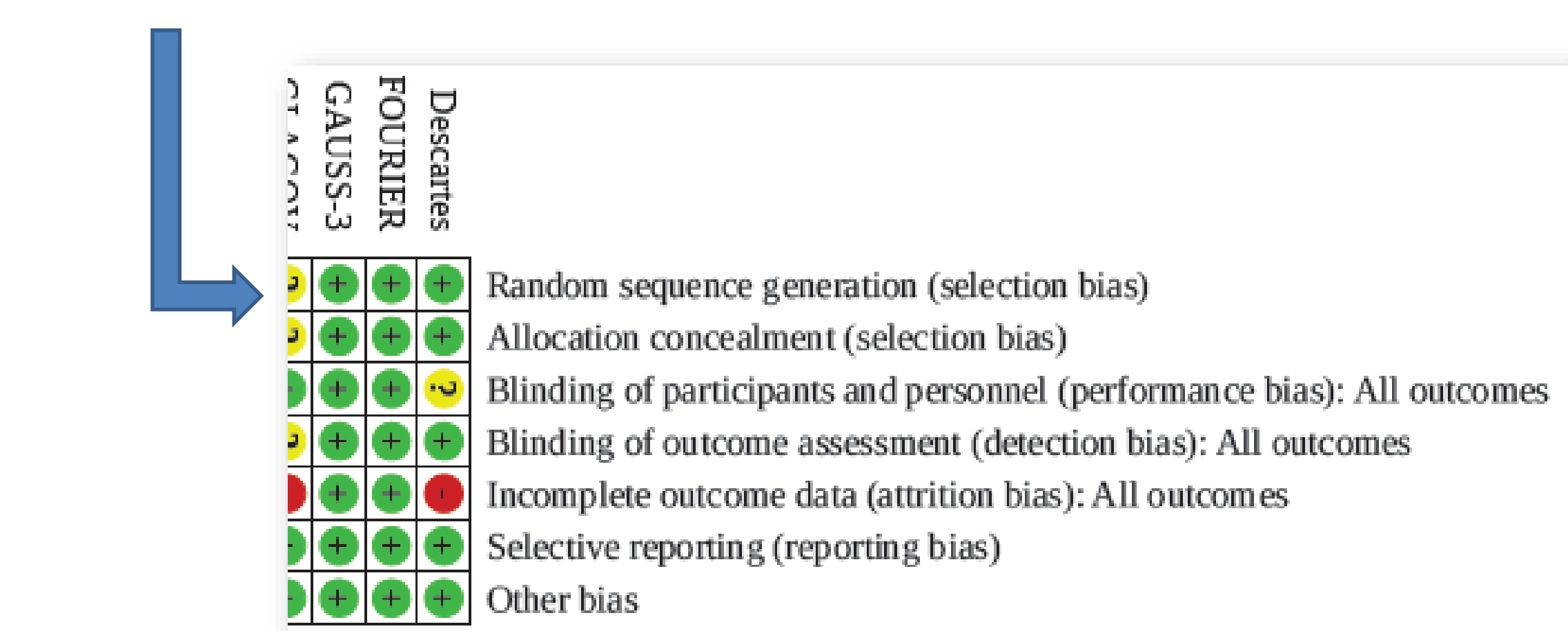
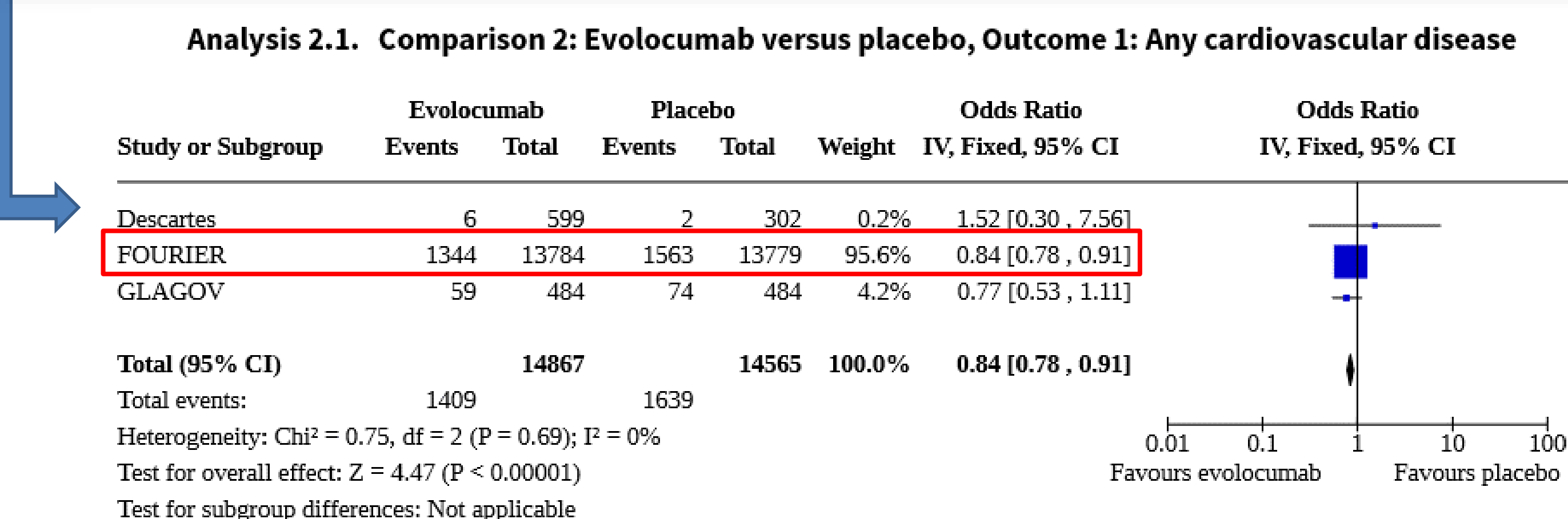
Results

RESULTS OF THE COCHRANE PRODUCTS INCLUDING FOURIER AND BTI-01-EC/07/ART

COCHRANE PRODUCTS LINKED TO **FOURIER**:

PCSK9 monoclonal antibodies for the primary and secondary prevention of cardiovascular disease (Review)

Schmidt AF, Carter J-PL, Pearce LS, Wilkins JT, Overington JP, Hingorani AD, Casas J. *Cochrane Database of Systematic Reviews* 2020, Issue 10. Art. No.: CD011748. DOI: 10.1002/14651858.CD011748.pub3.



PCSK9 inhibition for primary prevention of ischaemic heart disease in heterozygous familial hypercholesterolaemia (Protocol)

Ryan A, Nevitt SJ, Byrne CD, Cook P. *Cochrane Database of Systematic Reviews* 2018, Issue 1. Art. No.: CD012917. DOI: 10.1002/14651858.CD012917.

Cochrane Clinical Answers

Question:

What are the effects of PCSK9 monoclonal antibodies for preventing cardiovascular disease?

Adarsh Gupta
24 November 2020
<https://doi.org/10.1002/cca.3409>

Clinical Answer:

respectively). The analysis for the incidence of cancer included only 3806 participants and the result was imprecise. High certainty evidence shows that evolocumab also reduced the number of people who experienced a cardiovascular event (97 vs 113 per 1000 people), MI (34 vs 46 per 1000 people), or stroke (15 vs 19 per 1000 people), with little to no effect on mortality. Risk of developing type 2 diabetes did not appear to be increased with evolocumab (based on 29,433 participants); no trials reported on development of hypertension or incidence of cancer.

This was contradicted by the subsequent published restored trial based on its Clinical Study Report, which will likely lead to not being categorized as low risk in 'Reporting' and 'Other bias' domains.

COCHRANE PRODUCTS LINKED TO **BTI-01-EC/07/ART**:

Autologous blood product injections including platelet-rich plasma for osteoarthritis of the knee (Protocol)

Whittle SL, Johnston RV, McDonald S, Paterson KL, Buchbinder R. *Cochrane Database of Systematic Reviews* 2019, Issue 5. Art. No.: CD013341. DOI: 10.1002/14651858.CD013341.

Both ongoing protocols identified are expected to consider the restored trials for inclusion.

Conclusions

In the examples above, the **certainty of evidence** would likely be **downgraded** when restored versions of trials are considered.

Cochrane reviews including restored trials are in need of a **rapid update** to reflect the best available evidence, particularly **when restored trials had a major weight** on their reviews.

In parallel, Cochrane Central could **link restored and original versions of trials** to assist authors with the search and identification of restored trials.