Reviewer's report

Title: Coxibs and NSAIDs: balancing gastrointestinal and cardiovascular risk

Version: 1 Date: 28 August 2006

Reviewer: Angel Lanas

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General

The authors of this study had used evidence from meta-analyses of clinical trials and cohort studies regarding gastrointestinal bleeding and APTC events to determine annualised event rates for coxibs and NSAIDs, in order to clarify comparisons between them, and facilitate treatment choices.

This is an exercise that may be useful in clinical practice, now that the actual confusion regarding this issue has determined increasing rates of poor drug prescription and have increased the risk of gastrointestinal, and probably cardiovascular, side effects in patients with risk factors. I believe that providing rates of GI complications and CV events in different populations of patients taking NSAIDs is something we need in order to improve the management of patients with rheumatic diseases. The task is not easy providing the difficulties in doing that due to differences in study designs, study populations, event definitions and so on. The authors of the study acknowledge these aspects and point out a good number of issues that put the study in a correct perspective. However I believe that there are aspects that need to be improved in the manuscript:

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. I do not like mixing the word “serious” events with “GI complications”. This sounds like mixing different things. The authors must define perfectly what they are examining. I understand they are looking at the rate of GI complications and APTC events. I would eliminate those studies that do not report clearly GI complications.

2. The same comment deserves the term “closest equivalent”. It is difficult to understand the meaning of that.

3. The authors must explain how they have calculated the annual event rate for each outcome and provide statistics for that. It is unclear how the different studies have been counted. Different meta-analysis may contain the same studies, which suggests that we may have double counting, etc.. This issue is important in order to make the data presented credible.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct).

1. The abstract must contain a description of the different sections (background, methods, etc.).

2. Presenting data in Tables as annual event rates per 100 or per 1000 seems redundant.

Discretionary Revisions (which the author can choose to ignore)

1. It would be helpful if the authors could provide data for celecoxib 200 mg/day and 400 mg/day, and rofecoxib 25 mg and 50 mg/day.
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I have consulted for Merck, Pfizer, AstraZeneca and Takeda.

I have received fees for speaking and travel support from Merck, Pfizer, AstraZeneca and Takeda.