Reviewer's report

Title: Adjunctive corticosteroids for Pneumocystis jiroveci pneumonia in patients with HIV infection: a meta-analysis of randomised controlled trials

Version: 1 Date: 30 September 2005

Reviewer: Henry Koziel

Reviewer's report:

General
In this original manuscript Briel and colleagues re-address the utility of adjunctive corticosteroids for moderate-severe Pneumocystis pneumonia in HIV+ persons. The authors provide a meta-analysis of six published randomized reports, including two additional reports that were not available at the time of the NIH/UC Expert panel report (NEJM, 1990; 323:1500-1504). For patients who received adjunctive corticosteroids, risk ratios for overall mortality at 1 month and 3-4 months was lower. Furthermore, adjunctive corticosteroids may reduce the need for mechanical ventilation (based on meta-analysis of three available reports). The meta-analysis supports the use of adjunctive corticosteroids in HIV+ persons with mod-severe Pneumocystis pneumonia.

The manuscript is well-written and the data clearly presented. The specific new contribution of this manuscript to previously published literature relates to the inclusion of 2 reports not previously available for the consensus statements. The current manuscript also provides some insight into the influence of HAART in the use of steroids for HIV+ patients with Pneumocystis pneumonia. The data in the current manuscript represent an excellent summary of the available published studies, and support the clinical practice of corticosteroid use in HIV+ persons with mod-severe Pneumocystis pneumonia.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
None required.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Abstract: Under the "Conclusions" section, the authors should define "substantial hypoxemia." The term "substantial hypoxemia" is too vague. Providing the pO2 and/or A-a gradient would provide more useful information.

Discretionary Revisions (which the author can choose to ignore)
The Table provided as supplimental information, indicating the 2 excluded studies is helpful. However, I would encourage the authors to expand the table to also include the 6 studies included in the meta-analysis. In addition to the specific parameters reported in the author's Table of Excluded Trials, the new table should also include the number of subjects randomized to each treatment group, the corticosteroid dosing regimen and schedule used in the study, the timing for initiating corticosteroid, need for mechanical ventilation, 1-month mortality and 3-4 month mortality. If space allows, the new table should be included in the body of the manuscript rather than as Supplimental data. Such a table would very clearly highlight the essential information reported by each published randomized study, and allow the readers to better appreciate the variability in the clinical approach to corticosteroid use (as the consensus recommendation for the corticosteroid dosing is based on the largest randomized study, but the optimal corticosteroid dosing schedule has not yet been
established).

**What next?**: Accept after minor essential revisions

**Level of interest**: An article of importance in its field

**Quality of written English**: Acceptable

**Statistical review**: No

**Declaration of competing interests**: I declare that I have no competing interests.