Reviewer's report

Title: Monthly i.v. methylprednisolone in relapsing-remitting MS - Reduction of enhancing lesions, T2 lesion volume and plasma prolactin concentrations

Version: 1 Date: 13 February 2006

Reviewer: Marino Zorzon

Reviewer's report:

General
In this paper the Authors describe the effects of monthly i.v. methylprednisolone in relapsing-remitting multiple sclerosis.
The paper is well written and the text is well organized, i.e. the aims of the study, the study design and the methods employed are clearly detailed.
This is an important topic and reliable information about this issue are eagerly expected.
My concerns about this study are the same that the Authors themselves had: the number of patients is small, they were over-selected, length of follow-up is only 12 months, adverse events can't be reliably assessed in a 6-month therapy course. In addition, there were four relapses (three treated with steroids) during the follow-up and this may have somewhat alter the results. Obviously, in this single cross-over study the problem of the "regression to the mean" is central. The Authors have already acknowledged some of these criticisms in the Discussion. I would agree that their results only support further research.

-------------------------------------------------------------------------------

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

-------------------------------------------------------------------------------

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

--To strengthen their study the Authors used a comparison group of "historical" controls raising the usual criticisms against this method.
For instance, who and with what method “the mean number of new Gd+ lesions was calculated… and expressed as mean number of Gd+ lesions per scan”?
Furthermore, the Authors themselves state that the comparison group “had a mean frequency of Gd+ lesions which is higher than would be expected for an unselected population of MS patients”.
Are they an appropriate sample of MS patients?
Discussing on side effects of steroids (Discussion, pag 13, lines 19-20) they may cite a recent paper dealing with this issue (Zorzon et al. Eur J Neurol 2005, 12: 550-6).
Discussion pag 13, line 21 correct: Independent
Results pag 9, line 8 correct: figure 2 not 1. By the way figure 1 is never cited in the text.

Discretionary Revisions (which the author can choose to ignore)

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