Reviewer’s report

Title: Therapeutic effect of all-trans-retinoic acid (at-RA) on an autoimmune nephritis experimental model: role of the VLA-4 integrin

Version: 1 Date: 30 November 2006
Reviewer: David Power

Reviewer’s report:

General

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)
The time of administration of the at-RA needs to be stated in the Methodology. Presumably, it was given from the start of the induction of the model.
Statistics for the comparison of cellular infiltrates in the various groups (page 15) should be performed.
For Figure 4, the statistical comparison should be between the rats with nephritis that are either treated (group I) or not treated (groups II) with at-RA. Comparisons with vehicle treated rats are not really the point of the experiment, and simply give a baseline. The asterix is also placed wrongly in Fig 4B.
The Legend to Figure 5 should state what the two lines are in the flow cytometry histograms.
Statistical analysis should be applied to Figure 6.
In the Discussion, the authors should mention that the treatment was started prior to induction of the model (or so I assume), so the most important factor in the reduced damage with at-RA was probably reduced initial injury. To propose a significant contribution for other protective effects (eg. reduced leucocyte migration) the experiments would have to be repeated and at-RA given after the initial induction of the model had been performed.

Discretionary Revisions (which the author can choose to ignore)
The data from groups III and IV are not very important in some of the Figures, and one or other of the two groups could be removed at the discretion of the authors. This is so in Figures 3B and 5B.

What next?: Accept after minor essential 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 declare that I have no competing interests.