Reviewer’s report

Title: Treatment of Children and Adolescents with Ulcerative Colitis by Adsorptive Depletion of Myeloid Lineage Leucocytes as Monotherapy or in Combination with Low Dose Prednisolone After Failure of First-line Medications

Version: 2 Date: 31 May 2013

Reviewer: Jennifer deBruyn

Reviewer’s report:

Discretionary Revisions: None

Minor Essential Revisions
1. In the Abstract: Background paragraph, the authors indicate that “these medications in children and adolescent may adversely affect the patients’ growth and development.” This is only supported in the literature for corticosteroids and therefore these statements require revision.
2. The Abstract should contain a statement of the objective of the study.
3. The Abstract: Methods section should contain statement of the setting and time period of the study.
4. Abstract: Results paragraph: please clarify what is meant by “initial GMA sessions.”
5. Abstract: Conclusions: The final statement about “most young UC patients may respond to GMA and be spared from pharmacologics” is inappropriate as all 24 subjects were given 5-aminosalicylate treatment and 5 subjects required prednisolone.
6. Methods: Treatment design and efficacy assessment: Please describe the tapering schedule for prednisolone.

Minor issues not for publication
1. Abstract: Methods paragraph: remove, “an” before “11 sessions.”
2. Abstract: Methods paragraph: correct prednisolone dose to “mg/kg/day”.
3. Introduction: 1st paragraph: remove comma after “factors.”
4. Introduction: 1st paragraph: remove comma after “children.”
5. Introduction: last paragraph: correct grammar in the sentence of “the present article reports was on the efficacy and safety ...”

Major Compulsory Revisions
1. The authors describe that “GMA with Adacolumn is an established and officially approved extracorporeal treatment intervention for patients with active
IBD” in the METHODS section. The authors should clarify the context and setting of this statement as it is not an established and officially approved treatment worldwide.

2. Methods: Treatment design and efficacy assessment: Clinical activity index and disease activity index: Neither index is commonly used in contemporary studies. I am also unable to find the source for how these indices were developed and subsequently validated. This makes it difficult for readers to interpret the results of the study. Therefore, I recommend including the indices as supplementary tables and also identifying references that describe their development and validation.

3. Methods: Treatment design and efficacy assessment: The authors report that assessments were done within one week post last session. The results section should indicate the follow-up time for each patient (perhaps in table format).

4. Methods: Treatment design and efficacy assessment: Did all patients continue on salicylate therapy. The details of this should be included. Also, the dose by mg/kg should be included to ensure that patients were treated with an adequate dose of salicylate therapy.

5. Methods: Treatment design and efficacy assessment: The authors should clarify the dates of enrolment. Were there only 24 patients with UC assessed at the unit between 2000 and 2012. This seems like a very low number and also does not make sense in light of the duration of treatment in the “Results: Maintenance of remission” paragraph.

6. Figures 2 & 3: The x-axis should include a temporal component (ie, weeks) as it is unclear from the manuscript the varying lengths of follow-up time.

7. Results: subgroup analyses: Did the authors evaluate for any other predictors of response aside from CAI and DAI scores? For example, what about gender, age, duration of disease, disease extent, or laboratory parameters?

8. Results: treatment safety: What about the risk of infection given that granulocytes and monocytes are depleted? Were patients screened to rule out infection risk prior to commencement? (ie, stool studies for culture, Clostridium difficile)

9. Table 1: It would be helpful to include age, weight, baseline medication dose by mg/kg, and also to categorize the patients by treatment.

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

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'