Reviewer's report

Title: Comparison of double filtration plasmapheresis with immunoadsorption therapy in patients with anti-glomerular basement membrane nephritis

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Reviewer: Weixin wei Hu

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Comments on “Comparison of double filtration plasmapheresis with immunoadsorption therapy in patients with anti-glomerular basement membrane nephritis”

The study was aimed to compare the efficiency of removing anti-GBM and efficacy of improving renal function between two procedures of therapeutic apheresis, DFPP and IA. The study is interesting, but many serious deficiencies have been found in the manuscript, especially in the methods and results.

Major revisions:

1. Detailed procedure of IA is missing. Methods of DFPP is also incomplete, no description of blood flow, anticoagulant, plasma amount treated in each session and total sessions for one course of DFPP.

2. Immunosuppressive therapy, including methylprednisolone and MMF or CTX should be clearly stated, eg the time, doses, duration of treatment. The author should explain why MMF was selected to treat anti-GBM disease because CTX is recommended as the first choice of immunosuppressive drug.

3. The authors should analyse the clinical efficacy of the therapies in details rather than the effects of DFPP and IA to remove anti-GBM, this is most important for a new therapy, eg proportion of patients withdrawing from the RRT after 3 months or 12 months follow-up, or ESRD.

4. In regarding to compare the removal effects between the two therapies, because treatment sessions in a course were different between DFPP and IA, and different among patients, so it would be better to compare the reduction rate of serum anti-GBM after the same DFPP and IA sessions, and after a course of treatment. Also we want to know how the authors make the decisions of treatment sessions and how many patients became anti-GBM negative after a treatment course? It is recommended that plasmapheresis should be continued for 14 days or until anti-GBM antibodies are no longer detectable in the KDIGO guideline.

5. Unit of laboratory measurements should be added in table 2.

6. The most commonly used replacement fluid in TPE is human albumin solution, plasma is used as a replacement fluid in a limited number of diseases, for example TTP, It is inappropriate that the authors stressed the shortage of TPE in the section of introduction, discussion and abstract because of its requiring large
amount of plasma as compared with DFPP or IA. Also, no plasma is needed in the procedure of IA.

7. In the section of “clinical and pathologic data”, authors need to record the number of patients presenting with pulmonary hemorrhage; the number of patients requiring RRT in the text is inconsistent with the number in table 1

Minor revisions
1. The treating volume of plasma usually describe as 1.5 or 2 plasma volumes rather than “a double volume”
2. Fig 1 is not necessary
3. Some urine markers (NAG, RBP…) have nothing to do with this study.
4. Table 5 is of little value
5. In the last paragraph of the discussion, authors made a contradictory comments: “unless…, patients with high initial SCr and crescent formation do not require DFPP or IA.” “patients with higher percentage of cellular crescents should be treated with DFPP…”
6. The authors should make a conclusion what the different efficacy they have found between DFPP and IA, this is the main purpose of this study

**Level of interest:** An article of limited interest

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

The authors and I are working in the same department. I have no financial competing interests.