

PEER-REVIEW REPORT

Name of journal: World Journal of Hepatology

Manuscript NO: 61431

Title: Impact of donor-specific antibodies on long-term graft survival with pediatric liver transplantation

Reviewer's code: 03668558

Position: Editorial Board

Academic degree: MD

Professional title: Consultant Physician-Scientist, Doctor

Reviewer's Country/Territory: Italy

Author's Country/Territory: Germany

Manuscript submission date: 2021-01-25

Reviewer chosen by: Man Liu

Reviewer accepted review: 2021-03-02 08:22

Reviewer performed review: 2021-03-03 14:30

Review time: 1 Day and 6 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

I would like to thank for the opportunity to review this manuscript. This was a retrospective study on 123 pediatric liver transplant recipients, who underwent measurement of donor-specific antibodies (DSA) between 2013 and 2017. In my opinion, the most important findings of this study are: the high prevalence of DSA in paediatric liver transplant recipients; the difference in survival between patients with and without DSA; the different histological findings (e.g., fibrosis, chronic rejection) between patients with and without DSA. The topic is, in my opinion, of interest, since chronic rejection represents a main issue in the long-term care of paediatric liver transplantation. The study is, in my opinion, well-written, not redundant, and easy to understand. Moreover, several pitfalls of this study are reported in the Discussion section. Major comments: - the study cohort was not homogeneous. 87/123 had a first liver transplantation, whereas 36 had undergone at least two transplants. Moreover, the interval time since LT was heterogeneous (spanning between 1 and 19 years), and indications to liver biopsy were different (per protocol biopsies with heterogeneous timing vs. targeted biopsies according to clinical indications). Moreover, not all patients underwent liver biopsy. - Per protocol biopsies were performed in a higher rate in group 2 (e.g., those without DSA). Therefore, patients belonging to group 1 may have high risk of suspected rejection, and higher histopathological liver abnormalities. - The presence of normal liver enzymes in patients with histological signs of rejection is an interesting finding, which has been recently demonstrated in similar studies on paediatric liver transplant recipients. In my opinion, this point should be discussed more in depth, in order to provide a strong message for clinical practice. Minor comments: - Number of at risk patients may be added at the bottom of figure 2. - I would add the cause(s) of graft loss, adherence to immunosuppression.

RE-REVIEW REPORT OF REVISED MANUSCRIPT

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Academic degree: MD

Professional title: Consultant Physician-Scientist, Doctor

Reviewer's Country/Territory: Italy

Author's Country/Territory: Germany

Manuscript submission date: 2021-01-25

Reviewer chosen by: Han Zhang (Part-Time Editor)

Reviewer accepted review: 2021-04-13 05:37

Reviewer performed review: 2021-04-13 05:55

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The Authors fairly answered my previous comments. In my opinion, the issue of patients' selection remains, but it has been discussed in the appropriate section. Prospective data on this interesting topic will strengthen these findings. I do not see in Table 2 and Table 1 causes of graft loss and adherence rate.