PEER-REVIEW REPORT

Name of journal: World Journal of Transplantation

Manuscript NO: 61064

Title: A systematic review and meta-analysis of belatacept in renal transplantation in comparison to tacrolimus and molec-ular understanding of resistance pattern

Reviewer's code: 00504341

Position: Peer Reviewer

Academic degree: MD

Professional title: Professor

Reviewer's Country/Territory: France

Author's Country/Territory: United Kingdom

Manuscript submission date: 2020-11-26

Reviewer chosen by: Lian-Sheng Ma

Reviewer accepted review: 2020-11-26 08:04

Reviewer performed review: 2020-11-29 10:57

Review time: 3 Days and 2 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish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

SPECIFIC COMMENTS TO AUTHORS

In his manuscript "A systematic review and meta-analysis of belatacept in renal transplantation in comparison to tacrolimus and molecular understanding of resistance pattern." Kumar et al. after an instructive introduction, defined the intention of their work: A systematic review and meta-analysis of belatacept in renal transplantation, in comparison to tacrolimus on the clinical effectiveness of de novo belatacept as an alternative to Tac in patients undergoing renal transplantation. To their knowledge this is the first meta-analysis on the subject. Nevertheless, the author mentioned in their references that Muduma et al. simultaneously conducted two consecutive meta-analyzes comparing Tac to cyclosporine and cyclosporine to belatacept. However, the authors considered that this review failed to find any conclusive evidence of difference towards the beneficence of belatacept as primary maintenance immunosuppressive agent in place of Tac. On the other hand, the Authors' do not make direct mention of the work of Cohen, et al; ("Belatasept compared to tacrolimus for kidney transplantation": A propensity score matched cohort study…" Transplantation. 2017 Oct; 101 (10): 2582–2589). These authors performed a retrospective cohort analysis, using national registry data collected by the United Network for Organ Sharing (UNOS); this study is based on Organ Procurement and Transplantation Network (OPTN) data as of March 4, 2016. This study, also evidence a similar longitudinal risk of mortality and allograft failure compared to tacrolimus-based regimens to the work of Kumar et al. As a complementary comment to this analysis, it is interesting to mention that in the studies of risks and advantages of both schemes, it is of interest to evaluate the incidence of lymphoma in both therapeutic schemes. The potential financial limits of long-term therapy with Belatasep have also been mentioned. Therefore, this well-conducted study, in conclusion complements well-defined previous information on this important topic.

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what are limitations of the analysis