Peer Review File

Reviewer A

Comments to the authors: It is a very good updated review of the selection of patients with HCC for liver transplantation, including data and results from large series in the USA, Europe, China, Korea, except Latin America region. However, there are recent data from multicenter cohorts from Latin American centers that could be added to have a vision of all regions of the world.

- ***We have added the following paragraph to "The future of patient selection for DDLT":*** *"The application of the US HCC model for deceased donor liver allocation was applied in Argentina in the late 2000's. This experience represents a cautionary tale for the reproduction of liver allocation systems in countries (or regions) with different donation dynamics and resource availability. After MELD implementation, waitlist mortality increased (particularly among patients with chronic liver disease a low MELD score) while patients with HCC had the highest probability of being transplanted (up to 84% compared with 3% for patients with chronic liver disease and a low MELD score). Even though the increase in waitlist mortality may be multifactorial, the same phenomenon among patients with HCC has been observed in the US, which has led changes in the allocation system through the use of median MELD score for the region for patients with HCC fulfilling exception criteria. "*

Reviewer B

Comments to the authors: I suggest to include a small paragraph on the future directions in the end of the text

- ***We refer the reviewer to the section "The future of patient selection for DDLT".***

Reviewer C

Comments to the authors:

I had the pleasure to revise the manuscript entitled: Patient Selection in Liver Transplantation for Hepatocellular Carcinoma.

Here are my comments for the authors:

- There is quite abundant use of abbreviations that affect the fluency when reading the manuscript.
    - ***We removed the abbreviations: LT, DDLT, LDT, ESLD, MVI, AHR, AUC, CT, MR, PET-CT and BDTT***

- The metroticket reference and description should be updated to the 2018 publication of Mazzaferro, describing the Metroticket 2.0
    - **We have added the following paragraph to *Serum AFP:* *Mazzaferro led a binational study group that updated the Metroticket criteria in 2018 (version 2.0). Through competing-risk regression of training set from 3 Italian centers, the sum of tumor number and size (in centimeters) and AFP serum level were significantly associated with HCC-specific death. For patients with HCC to have a 70% chance of HCC-specific survival 5 years after transplantation, their level of AFP should be <200 ng/mL and the sum of number and size of tumors should not exceed 7; if the level of AFP was 200-400 ng/mL, the sum of the number and size of tumors should be ≤5; if their level of AFP was 400-1000 ng/mL, the sum of the number and size of tumors should be ≤4. This model was validated with cohort from China, showing an accuracy of 72%.***

- In 2017, UNOS modified their criteria for HCC exception points in relation to AFP. Candidates with lesions meeting T2 criteria, but with an AFP greater than 1000, are not initially eligible for a standardized MELD exception. Candidates who have an AFP below 500 after local-regional therapy will be eligible for a standardized MELD exception. Candidates with an AFP level greater than or equal to 500 at any time following local-regional therapy will be referred to the review board. This should be mentioned, since UNOS data is extensively described.
    - ***We have added the following paragraph to Serum AFP:** Based on these data, UNOS modified their criteria for HCC exception points in relation to AFP. Candidates with lesions meeting Milan criteria, but with an AFP greater than 1000, are not initially eligible for a MELD exception points. Candidates with AFP <500 after liver-directed therapy are eligible for MELD exception points. Candidates with an AFP ≥500 at any time following liver-directed therapy are referred to the National Review Board (25).*