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Editorial

Twelfth Forum on Liver Transplantation

Who should get a liver graft? ☆

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There is always a risk of controversy and conflict when demand drastically exceeds supply. This is the case with liver allografts in most countries. The success of orthotopic liver transplantation (OLT), which has reached a survival rate of about 90% at 1 year and 80% at 5 years [1], has lead to the wide acceptance of the procedure and an extension of indications and, as a consequence, the demand for liver grafts has far outpaced the supply.

In this twelfth forum, Richard Freeman, in collaboration with a number of experts, covers issues related to the allocation of organs in a comprehensive and well balanced manner. Dr. Neville Jamieson, from Cambridge, UK, critically examines the two opposing systems of organ allocation, center-based (UK system) *vs.* patient-based (e.g.; Eurotransplant countries or USA). Allocation to a center, which provides much room to choose the most appropriate recipient on the center list is applicable only in systems, where the number, localization, and activity of the respective centers are controlled at a national level. However, issues of access to organs as well as the ethical requirement to separate organ donation from allocation have brought center-based allocation to the end of the road, even in the British system. Allocation to a specific patient based on a calculated score, such as the model for end-stage liver disease (MELD), has enabled the distribution of organs among many centers resulting in reduced death on the waiting list without an increase in mortality [2]. However, this simple allocation system, prioritizing the sickest patient, is far from perfect [3]. The final goal remains optimal donor to recipient matching to maximize organ usage, fair distribution and excellent results. Dr. Douglas Schaubel, from the Department of Biostatistics in Ann Arbor, Michigan, USA, addresses the issue of urgency *vs.* utility *vs.* survival benefits. Knowledge of these definitions is crucial when discussing allocation policies of grafts, particularly when there is a definite mortality rate on the waiting list and following OLT. The MELD system is critically evaluated in light of those perspectives. Dr. Robert Porte, from Groningen, the Netherlands, covers the challenging topic of "extended criteria grafts". Recent studies have highlighted the diversity of donor organ quality and associated risks of malfunction after OLT, and thereby the need to consider those risks in the allocation scheme [4,5]. Definition, associated risks, and the question of how to adjust for the allocation of ECD grafts remains a challenge, which may also lead to developing protective strategies to reduce graft injury during organ preservation and after reperfusion. Dr. Richard Freeman from Boston, USA, covers the topic of allocating liver grafts to patients with hepatocellular carcinoma (HCC). This topic has also been covered in previous fora [6–8]. Staging as well as factors predicting drop out from the waiting list, and the MELD system, adjusted to the increased risk of death related to a HCC (HCC-MELD), are discussed in detail. Finally, Dr. Frederico Villamil, from Buenos Aires, Argentina, addresses the difficult issue of which patients with fulminant liver failure should get a graft, and if so, on the basis of which priority. A

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Abbreviations: MELD, model for end-stage liver disease; OLT, orthotopic liver transplantation; HCC, hepatocellular carcinoma.

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case is made to use the King's college criteria to differentiate between those who may need or not need an OLT. It is also highlighted that refined criteria, different from the MELD system, are needed to prioritize patients with acute liver failure.

I would like to thank Dr. Richard Freeman and his co-authors for their excellent and critical coverage of a delicate and difficult topic, where complex medical, ethical, social and economic issues are interrelated. I hope this forum will provide new insight into this topic, and serve as a platform for discussion in a variety of health care systems.

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