

LIVER ADVISORY GROUP

Proposal of a prospective multicentre observational study on liver allocation

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The mortality rate following liver transplantation has risen alarmingly across Germany after each major liver allocation rule change over the past few years. The survival rate after one year is currently only 72% in Germany, which is 20% lower than in the United States and the United Kingdom, even though Germany has more transplant centres and fewer organ donors per capita. Such scandals are leading to a steady decline in altruistic organ donations, with an 18% drop in the first quarter of this year compared with the same period in 2012. The situation largely reflects the absence of a national transplant registry in Germany and weak regulation of organ transplantation in Germany, especially by comparison with other European countries. Taken together the current situation in Germany demonstrates clearly that the current purely urgency-driven MELD-based liver allocation system has failed formidably in Germany.

The new liver allocation score (LivAS) that we have developed with retrospective data combines donor and recipient data in a prognostic model for the prediction of 3-month mortality after transplantation and demonstrates possible use for donor organ allocation by preoperative weighing of the predicted outcome after transplantation against the urgency of transplantation as predicted by the MELD-Score or the UKELD-Score. Our conclusions raise some significant questions of distributive justice, allocation ethics and resource management that ought to be subjected to a thorough debate.

Further it appears as a very interesting challenge to see whether a prognostic score for the outcome of liver transplantation developed in a German cohort can be validated prospectively with a large cohort from a different health care system in the UK with completely different liver allocation rules, no scandals in liver transplantation and significantly better outcomes. Deep insight into the relevant data as the basis for ethical weighing of urgency against utility in liver allocation can be anticipated from such a study that as a result may well lead to the successful design of a completely new and even better liver allocation score.