

# Attitudes and Barriers to the Use of Donation After Cardiac Death Livers: Comparison of a United States Transplant Center Survey to the United Network for Organ Sharing Data

## TO THE EDITOR:

We read with great interest the article wherein Sher et al. assess the nationwide practice in donation after circulatory death (DCD) liver transplantation in the United States.<sup>(1)</sup> On the basis of center criteria, the reported utilization rate of DCD grafts varies between 2% and 14% across the United States. Interestingly, some centers accept DCD livers for higher Model for End-Stage Liver Disease (MELD) candidates, possibly resulting from the MELD-based allocation system.

In contrast to the limited donor risk in the United States, we have no hard cutoffs for donor age and body mass index (BMI) in the United Kingdom. Consequently, we focus on restriction of cold storage (maximum of 6-8 hours) and recipient risk. In Birmingham, on the basis of recipient age, underlying disease, and MELD score, we define suitability for DCD grafts already when listing a candidate. Potential recipients with a foreseen prolonged hepatectomy time (ie, regrafting, known portal vein thrombosis) are deemed

unsuitable for DCD livers. Admittedly, this selective policy appears easier in our center-driven allocation. However, in the United Kingdom over the last 10 years, we witnessed a utilization rate of approximately 70% for DCD livers, with satisfactory survival rates.<sup>(2)</sup> Meanwhile in our center, we are using more marginal DCD grafts while maintaining graft survival rates that are not inferior to donation after brain death grafts.<sup>(3)</sup>

Furthermore, we recently found that DCD livers from elderly donors >60 years achieve excellent outcomes, provided other risk factors are limited.<sup>(4)</sup> Although no consensus regarding thresholds of specific risk factors exists, boundaries have recently been suggested not only for donor age, but also for donor warm ischemia, cold storage, MELD, and BMI. We believe therefore in the balance of risk concept and have developed a new prediction model, where futile DCD donor and recipient combinations are defined.<sup>(5)</sup> When the overall risk appears high on the UK-DCD-risk-score, options include the following: selecting a different DCD recipient, graft treatment with machine perfusion, or declining the offer.

In summary, this manuscript beautifully shows the current practice in DCD liver transplantation in the United States. On the basis of the UK experience, we would like to transmit our enthusiasm using marginal DCD grafts, and we support the authors' suggestions regarding the restrictions in recipient MELD score and duration of cold storage to further expand the donor pool.

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