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LETTER TO THE EDITORS

Response to: Sizing considerations in lobar lung transplantation

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In Response:

We thank Robert Reed and Michael Eberlein for their insightful comments and take the opportunity to clarify the mentioned aspects[6].

Given our possibility of 'centre allocation' of donor lungs, our choice of recipient and potential downsizing is dependent on the recipients urgency, real TLC, predicted TLC and chest configuration. Even though the anticipated size mismatch prior to retrieval allows to plan an operative strategy, the definite choice of downsizing procedure is made intraoperatively by size comparison of the open chest cavity and the inflated donor lung. In reduced-size lung transplantation, the estimation of the actually implanted lung volume is difficult and to our knowledge there is yet no generally accepted computational approach [1]. The mentioned value of 20% TLCp difference as an indicator for the need of lobar transplantation is derived from the retrospective review of our data and can be used as an additional parameter in the planning of the transplant procedure; however, it is certainly not to be seen as a definite stand-alone cut-off value.

Although we agree that the TLCp-ratio is a valid parameter in decision making, we think that other relevant factors such as TLCr and chest configuration must always be taken into consideration.

Our current approach is to aim for an optimal size matching. Even though undersizing was shown to have a worse short-term survival [2] and a higher rate of BOS [3], broad scientific evidence is still missing and another study claims that a wide range of size discrepancies can be accepted without affecting outcome [4]. Oversizing of lungs can be problematic as well with a higher likelihood of oedema, atelectasis, retained secretion and impaired breathing mechanics [5].

The crucial question whether or not to perform lobar-LuTX or to wait for a perfectly matched organ cannot be answered definitely by our paper and also strongly depends on local circumstances like donor organ availability and possibilities for patients with bridging acute deteriorating. Finally, we commend Reed and Eberlein on their efforts to further elucidate the importance of optimal size matching and size-reducing measures.

Conflict of interest

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