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LETTER TO THE EDITORS

Response: old-to-old pancreas transplantation, what's old in the USA may be young in Europe

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We appreciate the comments made by Blok and colleagues [1] about our study and herein provide our response.

Blok and co-authors describe excellent pancreas graft outcomes of old-to-old SPK transplantation from their center in Leiden. Their data did not demonstrate a significant difference in death-censored pancreas graft survival (DCGS) between groups, and the authors suggest that our finding of poorer outcomes of old-to-old SPK in the USA is not generalizable to their country. However, with 75 cases of old-to-old recipients (and a 74% 3-year DCGS) and 103 cases of young-to-old recipients, their sample would require a difference of over 21% to detect significance (power 80%; alpha level 0.05) between these two groups. Therefore, there may be a meaningful difference in the graft survival of old recipients of old- versus young-donor SPK at their center; however, it is likely there is not enough sample size to detect it statistically.

Blok and colleagues state that our finding that "wait-listed candidates do not receive a survival benefit from accepting old-donor SPK-…would not be applicable in The Netherlands, since the chance for a young donor is very low and would probably lead to an even longer wait-time." We demonstrated that when the waiting time is long (≥604 days), there is no survival benefit to waiting for a young-donor organ in lieu of an older one that could be provided sooner. Therefore, our findings may be especially applicable to clinicians in the Netherlands in support of their current practice of transplanting old-donor organs in the context of long waiting times.

Blok and co-authors point out that more (37%) pancreas donors accepted for transplantation at their center were ≥40 years old as compared to in the USA (14%). Also in contrast, the Leiden group directs more of the older donor organs to young patients (29%) compared with the USA (8%). If US centers were more willing to transplant young recipients with old pancreata, the utilization of old pancreas donors would likely be higher in the USA. The tendency of the Leiden group for greater utilization of old-donor pancreata into young recipients may be a reasonable approach according to our analysis, which shows that older recipients are at a much higher risk of death-censored pancreas graft failure when receiving old (aHR 2.2)- versus young-donor organs; whereas young recipients do not have the same magnitude of risk (aHR 1.5) after transplantation of old- versus young-donor organs.

The authors suggest that our findings may not be applicable to their patient population due to differences in donor and recipient characteristics between the two areas. We suspect that our findings of a proclivity toward worse outcomes with older donor organs and a survival benefit with transplantation of younger donor organs if waiting times are not too long will also be true in other populations. The question that remains to be determined is whether the cutoff of 40 years of age would also be applicable in the Netherlands as the donor age at which outcomes start to worsen.

Liise K. Kayler,[1] Xuerong Wen,[2] Mareena Zacharai,[3] Michael Casey,[2] Jesse Schold[4] and Joseph Magliocca[5]
1 Department of Surgery, Montefiore Medical Center, Bronx, NY, USA
2 Department of Medicine, University of Florida, Gainesville, FL, USA
3 Department of Medicine, State University New York at Buffalo, Buffalo, NY, USA
4 Department of Quantitative Health Sciences, Cleveland Clinic, Cleveland, OH, USA
5 Department of Surgery, Emory University, Atlanta, GA, USA
e-mail: liisekayler@yahoo.com

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Reference

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