

LETTER TO THE EDITORS

Old-to-old pancreas transplantation, what is old in the USA may be young in Europe

doi:10.1111/tri.12236

Dear Sirs,

With interest we read the recent article by Kayler *et al.* [1] in your Journal. The authors report the results of old-to-old simultaneous pancreas kidney transplantation (SPKT) with the data of the Scientific Registry of Transplant Recipients (SRTRs). Their study shows that patient and death-censored pancreas graft survival of old-to-old SPKT are inferior as compared to young-to-old SPKT: at 3-years follow-up, respectively, 84% vs. 90% (P=0.03) and 65% vs. 73% (P=0.54). Multivariate analyses gave adjusted hazard ratios (HR) for old-to-old compared with young-to-old of 1.91 (patient survival) and 2.24 (death-censured pancreas graft survival). We hereby presume that the end-point taken by the authors is the restart of insulin therapy.

In our own center, 37% of the pancreas donors were \geq 40 years old (median 36 years) and 59% of our recipients are \geq 40 years (median 42 years), leading to an old-to-old group of 25% in our dataset (unpublished; n=301, 1984—2011) as compared to 16% in the Organ Procurement and Transplantation Network (OPTN) area.

A Kaplan–Meier analysis of (death-censured) pancreas allograft survival in our center (based on the definition by the Pancreas Transplant Committee [2] e.g. combination of insulin re-start and HbA1c) comparing the four groups (young-to-young, young-to-old, old-to-young, and old-to-old) did not show significant differences (P = 0.19), with a 74% 3-year graft survival (vs. 65% in the OPTN area) in the old-to-old group. These results, which are at least comparable with the OPTN, demonstrate the difference in outcome between the USA (OPTN) and one European pancreas transplantation center. Furthermore, there is a difference in donor and recipient characteristics between the two areas, something that was shown earlier for the liver donor population [3].

The fact that the authors chose 40 years (for donor and recipient) as a cutoff in the analysis to define 'older' age groups was due to a preliminary Cox-regression analysis; however, within Europe (or the Netherlands), a donor of ≥40 would not be categorized as an 'old' pancreas donor. Within the Netherlands, the age limit for pancreas

donation is currently set at 60 years [4]. Obviously, a pancreas donor would ideally be <40 years of age, but in Europe and specifically the Netherlands, this is unfortunately not the case.

The authors mention that their findings suggest that older candidates can be safely transplanted, particularly when transplanted with younger organs. The preliminary results of our own dataset suggest that old recipients can also be safely transplanted with an 'older' organ (especially if old is defined as ≥40). One of the conclusion of the authors, wait-listed candidates does not receive a survival benefit from accepting old-donor SPK organs over remaining on the waiting list for organs from a young donor, would not be applicable in the Netherlands, as the chance for a young donor is very low and would probably lead to an even longer wait-time.

We congratulate the authors with the results of their study and hope that these results will be the first step toward a survival benefit model for pancreas transplant candidates. Unfortunately, the results are most likely not applicable for most European pancreas transplantation centers.

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Conflict of interests

The authors of this manuscript have no conflict of interest.

Funding

This Letter to the Editor was not prepared or funded in any part by a commercial organization.

References

- Kayler LK, Wen X, Zachariah M, Casey M, Schold J, Magliocca J. Outcomes and survival analysis of old-to-old simultaneous pancreas and kidney transplantation. *Transpl Int* 2013; 26: 963.
- 2. Gruessner RW. Interim Report Pancreas Transplantation Committee. Chicago, IL, November 21, 2008, 5–12.
- 3. Blok JJ, Braat AE, Adam R, *et al.* Validation of the donor risk index in orthotopic liver transplantation within the Eurotransplant region. *Liver Transpl* 2011; **18**: 112.
- 4. Ringers J, Spreij A, Costeris N, *et al. Modelprotocol postmortale orgaan- en weefseldonatie versie 7.* Leiden, the Netherlands: Dutch Transplantation Foundation 2013: 134 pp.