

Letter to the Editor

Comment on the Article “OPTN/SRTR 2015 Annual Data Report: Pancreas”

We read with great interest the most recent “OPTN/SRTR 2015 Annual Data Report: Pancreas” (1).

We would like to bring to the attention of the editors and authors our serious concerns with respect to flaws in this SRTR report specifically related to pancreas transplantation alone (PTA).

First, we noted substantial discrepancies in the number of PTAs (Table PA 1) presented in this article versus the number of PTAs that the International Pancreas Transplant Registry (IPTR) uses for its current analyses. For example, this SRTR report listed 106 adult PTAs in 2015 versus 68 adult PTAs identified by the IPTR. Of note, the two registries are based on identical OPTN/UNOS data.

When we analyzed the observed difference in PTA numbers, we realized that the SRTR report, much to our surprise, included multiorgan transplantations in the PTA category. However, combining true PTAs with pancreas transplantations as part of multiorgan transplantations is incorrect and leads to misinterpretation. These multiorgan transplantations include pancreas transplantations in various combinations with liver, intestine, lung, and/or heart transplantations.

In general, PTAs are performed only in patients with labile/brittle diabetes mellitus and stable function of native kidneys. A successful PTA achieves long-term insulin independence; may prevent, halt, or reverse secondary complications of diabetes; and may prevent the need for future kidney transplantation secondary to diabetic nephropathy. The intent of a PTA is, therefore, very different from that of a multiorgan transplantation. PTA and multiorgan transplant categories represent two completely different patient cohorts. Multiorgan transplantations are usually performed for liver and/or intestinal failure. The pancreas is mostly included to facilitate the surgical aspect of this complex procedure. Inclusion of the pancreas basically abrogates the need for a separate and tedious bile duct anastomosis. This is by and large the primary intent for including a pancreas.

Second, we noted a significant higher mortality rate for PTAs in the SRTR report versus current IPTR analyses. In fact, PTA mortality as reported in the SRTR article was higher than for simultaneous pancreas–kidney

transplantations (SPKs) and for pancreas after kidney transplants (PAKs), as shown in Figures PA 61, 62, 63, and 64. As an example, Figure 1 now shows the corrected outcome for Figure PA 61.

Because of its surgical complexity, the mortality of multiorgan transplantations is one of the highest in the field and significantly higher than for PTAs. By combining pancreas transplants in the PTA and multiorgan transplant categories, the mortality rate in the PTA category is falsely increased (2).

Third, we noted that pediatric recipients were part of the SRTR report. Of note, according to IPTR data, not a single child received a PTA, SPK, or PAK in 2015 for the treatment of diabetes mellitus alone. Those cases should be clearly marked as multiorgan transplantations.

Although we did not examine the reported PTA graft survival, we cannot rule out an incorrectly low survival rate based on the inflated PTA transplant numbers and the fact that pancreas survival as part of a multiorgan transplantation is much lower than in the PTA category.

The errors that we identified in the current SRTR report and as being specific to the PTA category may lead not

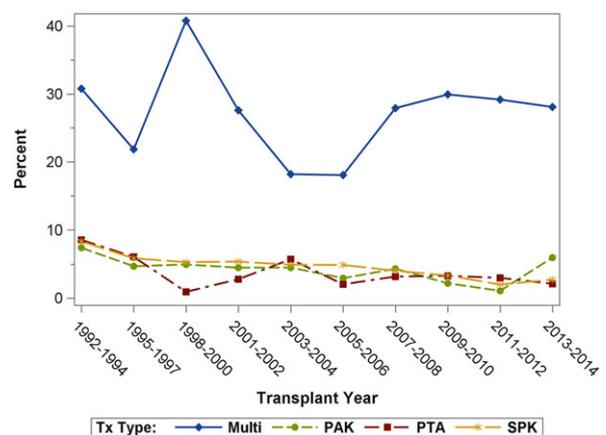


Figure 1: Patient death at 1 year among adult primary pancreas transplant recipients according to corrected transplant category.

only to a misrepresentation but also to an unwillingness to perform this safe, life-enhancing, and potentially life-saving procedure.

We decided to write this letter based on a previous experience that had a major negative impact on the field of pancreas transplantation. In 2003, an article was published in *JAMA* about unfavorable outcomes after solitary pancreas transplantations (PTA and PAK) (3). The mortality risk was clearly overstated as a subsequent IPTR analysis in this journal (*AJT*) showed, using the same patient cohort (4). The impact of that faulty report was massive. It contributed to the significant decrease in the number of solitary pancreas transplantations since 2004. The intention of this letter is to avoid a similar development in the PTA category, which remains associated with a low mortality rate.

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Disclosure

The authors of this manuscript have no conflicts of interest to disclose as described by the *American Journal of Transplantation*.

References

1. Kandaswamy R, Stock PG, Gustafson SK, et al. OPTN/SRTR 2015 annual data report: pancreas. *Am J Transplant* 2017; S1: 117–173.
2. Gruessner AC, Gruessner RW. Pancreas transplantation of US and non-US cases from 2005 to 2014 as reported to the United Network for Organ Sharing (UNOS) and the International Pancreas Transplant Registry (IPTR). *Rev Diabet Stud* 2016; 13: 35–58.
3. Venstrom JM, McBride MA, Rother KI, Hirshberg B, Orchard TJ, Harlan DM. Survival after pancreas transplantation in patients with diabetes and preserved kidney function. *JAMA* 2003; 290: 2817–2823.
4. Gruessner RW, Sutherland DE, Gruessner AC. Mortality assessment for pancreas transplants. *Am J Transplant* 2004; 4: 2018–2026.