The Shrinking PAK List: Why?

Sally Gustafson, MS* Raja Kandaswamy, MD David Axelrod, MD, MS Jon Snyder, PhD Ajay Israni, MD, MS Bertram Kasiske, MD Peter Stock, MD

Scientific Registry of Transplant Recipients & OPTN Pancreas Transplant Committee

*Presenter



The 12th Joint Annual Congress of the American Society of Transplant Surgeons and The American Society of Transplantation

Sally Gustafson, MS Biostatistician II Scientific Registry of Transplant Recipients (SRTR), Minneapolis, MN Chronic Disease Research Group (CDRG), Minneapolis, MN

I have no financial relationships to disclose within the past 12 months relevant to my presentation,

<u>AND</u>

my presentation does not include discussion of off-label or investigational use.

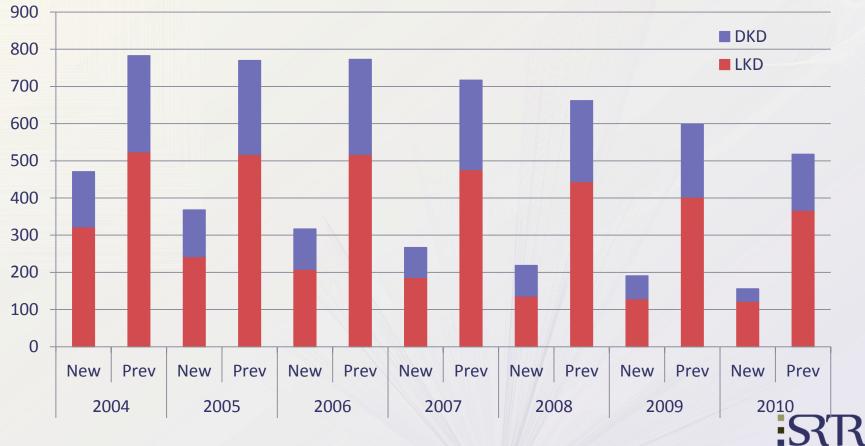
Pancreas-After-Kidney

- This analysis describes listing and transplant behavior in primary Pancreas-After-Kidney (PAK) transplant recipients from 2004-2010 who also have a confirmed UNOS record of a kidney transplant.
- Those with a previous simultaneous kidney-pancreas (SPK) transplant are excluded.
- Data is from the Scientific Registry of Transplant Recipients (SRTR).

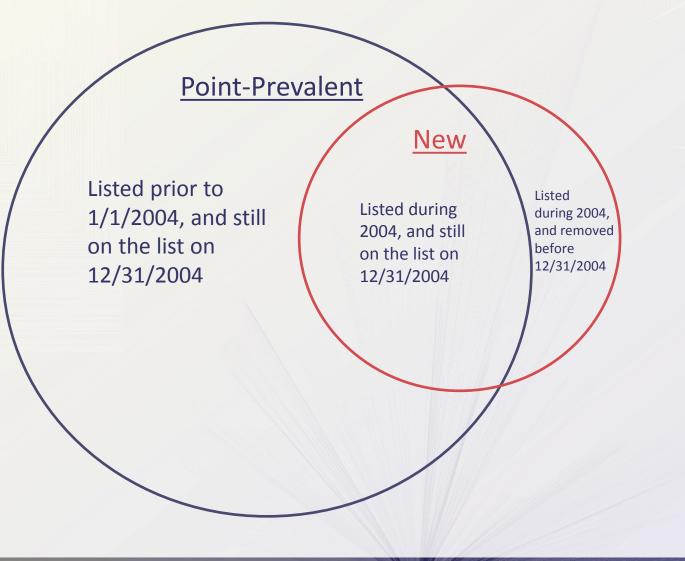


The PAK Waitlist

- Both new listings, prevalent listings, and transplant rates in PAK candidates have declined since approximately 2004.
- Meanwhile, the ratio of prevalent to new listings has increased.



Example of "New" versus "Prevalent," 2004





New versus Prevalent, average years on list as of 12/31/year

Year	New Listings (max=1 year)	Prevalent, Not New
2004	0.51	2.7 years
2005	0.54	2.8
2006	0.50	3.2
2007	0.53	3.5
2008	0.50	3.6
2009	0.53	3.7
2010	0.53	4.0

- Time on the list per year for new listings remains consistent over time as we would expect.
- However, the yearly cohort of non-new prevalent patients (e.g. listed in a year previous to the year in question) has an increasingly long wait time.



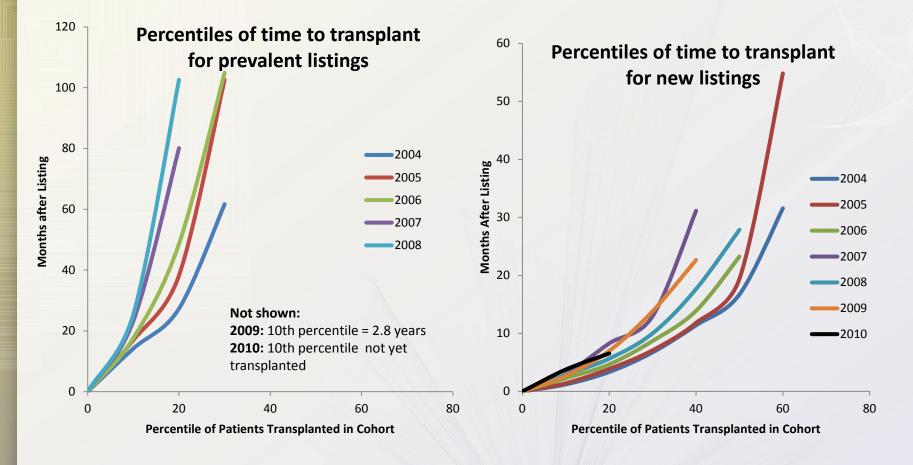
Transplant Rates in New versus Prevalent

• Time to transplant for cohorts in months:

Year	Cohort	First 10%	First 20%	First 30%	First 40%	First 50%
2006	New	2.3	4.7	8.7	13.9	23.3
	Prevalent	17.6	48.6	104.9	>105	>105
2007	New	3.0	8.3	13.0	31.1	>31.1
	Prevalent	23.3	80.1	>80.1	>80.1	>80.1
2008	New	2.9	5.7	10.0	17.6	27.9
	Prevalent	25.5	102.6	>103	>103	>103
2009	New	2.7	7.0	13.8	22.7	>23
	Prevalent	33.9	>33.9	>33.9	>33.9	>33.9

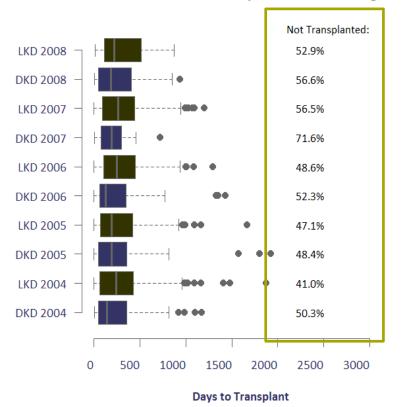


Transplant Rates in New versus Prevalent

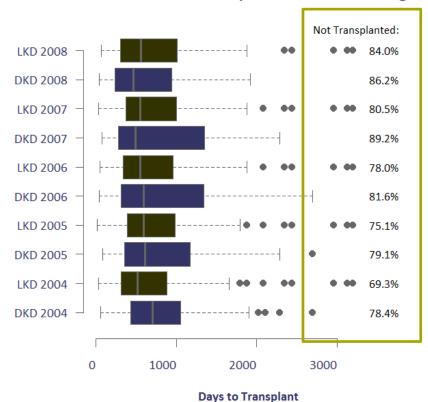




Observed Time to Transplant



Observed Time to Transplant for New Listings



Observed Time to Transplant for Prevalent Listings

• Disparity in percent transplanted by new/prevalent, and by living/deceased kidney donor.

• Time to transplant is censored at 12/31/2010 for all cohorts.



Final Observations

- Despite a decreased volume of new PAK listings, the transplant rate is falling.
- There is an increasing carry-over of prevalent candidates from year to year.
- Why are these candidates staying on the list?
- Possibilities:
 - OPO practice (kidney-pancreas priority over pancreas-alone)
 - Patient characteristics (CPRA, access to transplant, overall health, kidney donor type)
 - Center performance (wait-list maintenance, including monitoring and removal of inactive patients and organ turndown)



Future Directions: Is this disparity preventable?

- Per candidate basis
 - Compare characteristics of candidates transplanted versus still waiting within a given time period (e.g. cPRA, race, DSA, available health variables)
- Per DSA basis:
 - Compare percentages of active/inactive candidates
 - Examine ratio of organ offers received versus accepted for active patients

