Disclosures

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I have no financial relationships to disclose within the past 12 months relevant to my presentation. The ACCME defines ‘relevant’ financial relationships as financial relationships in any amount occurring within the past 12 months that create a conflict of interest.

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A Patient-Facing Tool for Multiorgan Transplant Outcomes

Y. Ahn, MS; G. Lyden, PhD; Y. Mi; D. Zaun, MS; C. Schaffhausen, PhD; J. Snyder, PhD, MS; A. Hart, MD, MS

June 6, 2023
Background

- Patients needing multiorgan transplants have difficulty finding information about outcomes, whereas ample data on single-organ transplants are available.

- We developed a patient-facing multiorgan transplant tool to provide interactive information about the number of transplants performed nationally and by program, national-level death and graft failure rates at up to 10 years posttransplant, and an individualized risk calculator to predict posttransplant outcomes for the 3 most-performed adult multiorgan transplant combinations: kidney-pancreas, liver-kidney, and heart-kidney.
Methods

• Used Scientific Registry of Transplant Recipients (SRTR) data for adult and pediatric multiorgan transplant recipients who received transplants January 1, 2010 – June 30, 2022.
  • Select multiorgan transplant combination, cohort start year 2010 vs 2015, and adult vs pediatric
• Outcomes were death and all-cause graft failure.
  • Unadjusted Kaplan-Meier survival analysis for each outcome with censoring on June 30, 2022
• An individualized risk calculator: After selecting various fields, a mixed-effects Cox model is fit with the organ-appropriate predictors and a random effect for transplant program. The modeled proportional hazards to predict the probabilities of experiencing each outcome after transplant.
## Results

### Multi-Organ Transplant Analysis Tool

#### Information for Simultaneous Kidney-Pancreas Transplant

<table>
<thead>
<tr>
<th>Center</th>
<th>Number of transplants performed since 2010</th>
<th>Maximum age among performed transplants since 2010</th>
<th>Male</th>
<th>City</th>
<th>Zipcode</th>
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<tbody>
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<td>39.4</td>
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</tr>
</tbody>
</table>

Note: Counts include transplants performed from Jan 2010 through June 2013.

Showing 1 to 10 of 144 entries

[SCIENTIFIC REGISTRY OF TRANSPLANT RECIPIENTS](http://www.srt.org)
Results

Multi-Organ Transplant Analysis Tool

Information for Simultaneous Kidney-Pancreas Transplant

- List of Centers
- National Number of Transplants
- Outcomes

Number of simultaneous kidney-pancreas transplants performed in the U.S. by year

Data include transplants through June 2022
Results

Multi-Organ Transplant Analysis Tool

Choose your transplant combination:
Kidney-Pancreas

Choose your age group:
Adult (18+)

Choose your state:
All states

Transplants shown are from 2015 on. Check this box to see transplants from 2010 on, for long-term post-transplant outcomes.

Enter your zip code

Information for Simultaneous Kidney-Pancreas Transplant

List of Centers National Number of Transplants Outcomes

How many years of outcomes after transplant do you want to see?

1 2 3 4 5 6 7 8 9 10

5-year simultaneous kidney-pancreas posttransplant graft failure including death and death outcomes

Percent of recipients

Death Kidney failure including death Pancreas failure including death

Data include transplants through June 2022
What are your likely outcomes after kidney-pancreas transplant?

Choose a transplant program. For a typical center experience, choose ‘None’:
- None

Choose your age:
- 60

Choose your gender:
- Male
- Female

Choose your ethnicity:
- Latino
- Not Latino

How many years have you been on the waiting list?
- 3

Are you currently on dialysis?
- Yes
- No

How many years have you been on dialysis?
- 0

Have you had a transplant before?
- Yes
- No

Enter your height:
- Foot: 5
- Inch: 9

Enter your weight:
- Pounds: 160

I know my antibody level (calculated PRA)

Figure 1: Estimated 5-year posttransplant outcomes of a kidney-pancreas transplant recipient, White / non-Latino, male, on waitlist for 3 years, BMI 23.6, PRA 15, not on dialysis at transplant.

Data include transplants from January 2010 through June 2022.
Transplantation

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