

# Expert Teams – Transplantation

*Case-Based Learning & Mentorship*

Thursday, October 21, 2021

Facilitator: Kelly M. Mayo, ESRD National Coordinating Center



# Meeting Logistics

- Call is being recorded and will be posted to [www.esrdncc.org](http://www.esrdncc.org)
- Lines will be open for all high performing organizations
  - Please stay on mute unless you are speaking
  - Do not place the call on “hold”
- Everyone is encouraged to use the video and chat features



# Meeting Guidelines



INTRODUCE YOURSELF  
BEFORE SPEAKING



KEEP PATIENT-SPECIFIC  
INFORMATION  
CONFIDENTIAL



BE WILLING TO SHARE  
SUCCESSSES AND  
DIFFICULTIES



BE OPEN TO FEEDBACK



ASK THE DIFFICULT  
QUESTIONS



RESPECT OTHERS



USE "...AND" STATEMENTS



KEEP TO TIME LIMITS

# Introductions

- Meeting Focus – Kidney Transplant
- Guest Expert –
  - Bonnie Lonze, MD, PhD, NYU Langone (NY)
- Case Study Presenter –
  - Michael Guthrie, LMSW, Durant DaVita (OK)
  - Rick Perez, MD, University of California – Davis (CA)
- High Performing Organizations
- ESRD Networks
- Centers for Medicare & Medicaid Services (CMS)



# What are Expert Teams?

- A group made up of individuals from different high performing organizations, each with their own deep experience and knowledge
- Help others learn faster by sharing what worked (and what didn't work) in their organization
- Bring the best possible solutions to the table
- Continually learn and improve

# Kidney Transplantation

- Increase the number of patients added to the kidney transplant waiting list
- Increase the number of patients receiving a kidney transplant
- Develop education to increase choice of dialysis patients to receive a high KDPI kidney
- Support the ESRD Treatment Choices Learning Collaborative (ETCLC)



# Presentation by Guest Expert

## **Bonnie Lonze, MD, PhD**

Assistant Professor, Department of Surgery at NYU Grossman School of Medicine  
Director, Incompatible Kidney Transplant Program  
Kidney Transplant Surgeon, NYU Langone Transplant Institute

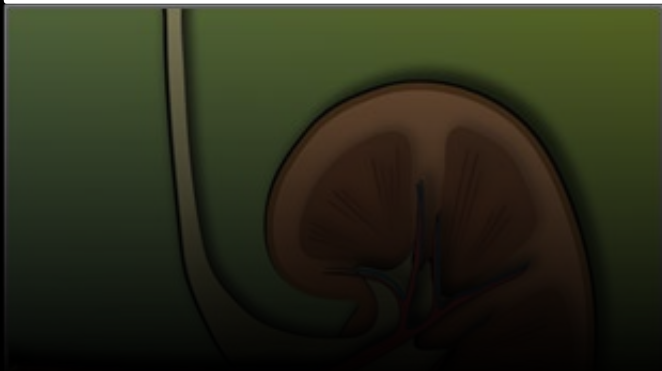
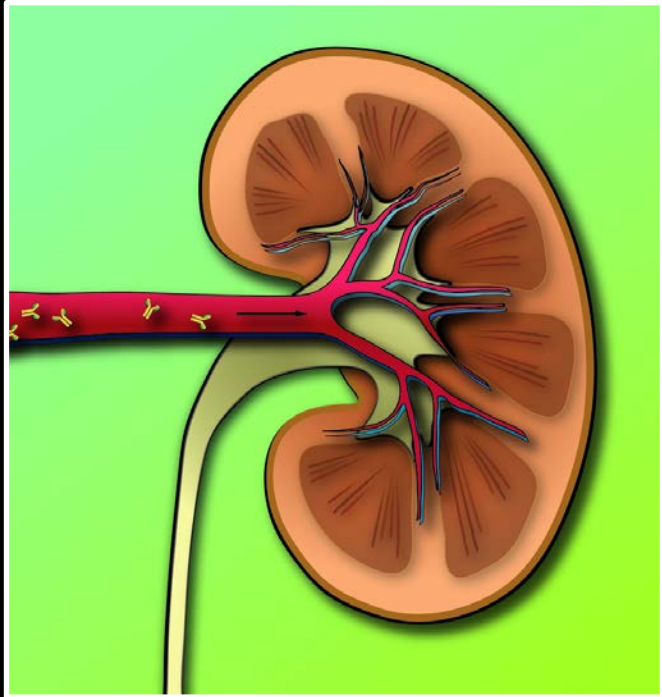


An aerial photograph of New York City, showing the dense urban landscape of Manhattan. Central Park is visible in the lower-left quadrant, and the Hudson River flows along the right edge. The sky is overcast with soft, diffused light. A semi-transparent white box with rounded corners is positioned in the upper-left area, containing the title text.

# **Minimizing Kidney Discard: Giving Every Organ a Chance**

**Bonnie Lonze • Transplant Institute • NYU Langone Health • New York, NY**





## Supply vs Demand

~90,000 Americans are awaiting kidneys

~20% of kidneys recovered are discarded

## Systematic strategies to decrease discard



Donation after cardiac death



“PHS increased risk” donors



HCV+ organs (for HCV- recipients)



HIV+ donors

Now, most discarded kidneys are “less than ideal” kidneys

# Emerging systematic efforts: OPTN's KAP

American Journal of  
**TRANSPLANTATION**

AST | AMERICAN SOCIETY OF  
TRANSPLANTATION

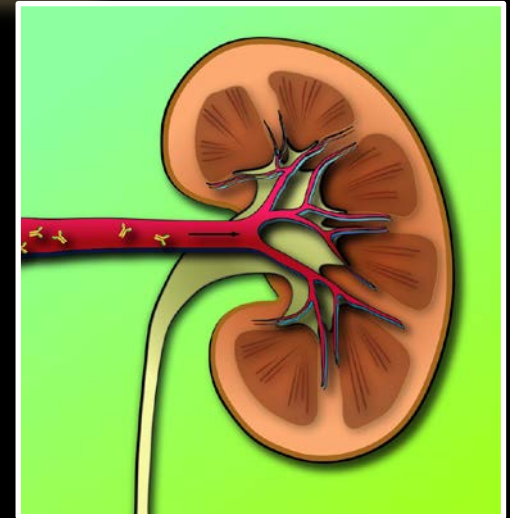
ASTS  
AMERICAN SOCIETY OF  
TRANSPLANT SURGEONS

ORIGINAL ARTICLE

## Kidney Accelerated Placement project: Outcomes and lessons learned

Samantha M. Noreen ✉, David Klassen, Roger Brown, Yolanda Becker, Kevin O'Connor, Jennifer Prinz, Matthew Cooper,

First published: 28 September 2021 | <https://doi.org/10.1111/ajt.16859>



Pilot of expediting placement of “hard to place kidneys” by focusing allocation on centers with track records for using these types of kidneys

## Small scale practices can have an impact!

My phone at 3AM:

Primary KI offer:  
'Late 50s' year old diabetic,  
hypertensive, hepatitis C+,  
brain dead donor, died of  
stroke, KDPI 100%

The easy answer:

No, thanks.

## Give every offer a chance!

My phone at 3AM:

Primary KI offer:

'Late 50s' year old diabetic, hypertensive, hepatitis C+, brain dead donor, died of stroke, KDPI 100%

The alternative answer:

What is blood type, biopsy, Cr, and how much cold?

## Give every offer a chance!

Blood type is O



I have at least 20 Os over the age of 60 who are willing to accept HCV+

Cr is 0.9



OK!

Bx is "inadequate"



OK?

Current CIT 9hrs



Bring it in and re-bx

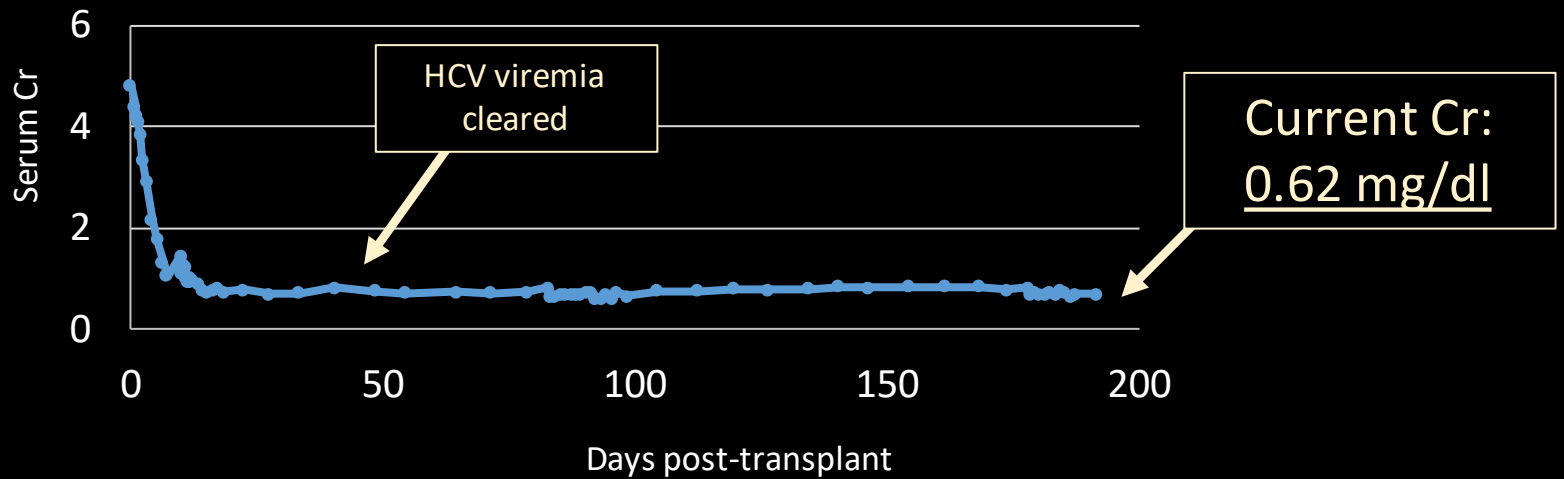


Repeat biopsy good



No anatomical concerns

### Serum creatinine over time since transplant



## Give every offer a chance!

My phone at 3AM:

Primary KI offer:  
50s yo donor, normal Cr,  
declined for HARD arterial  
plaque

The easy answer:

No, thanks.



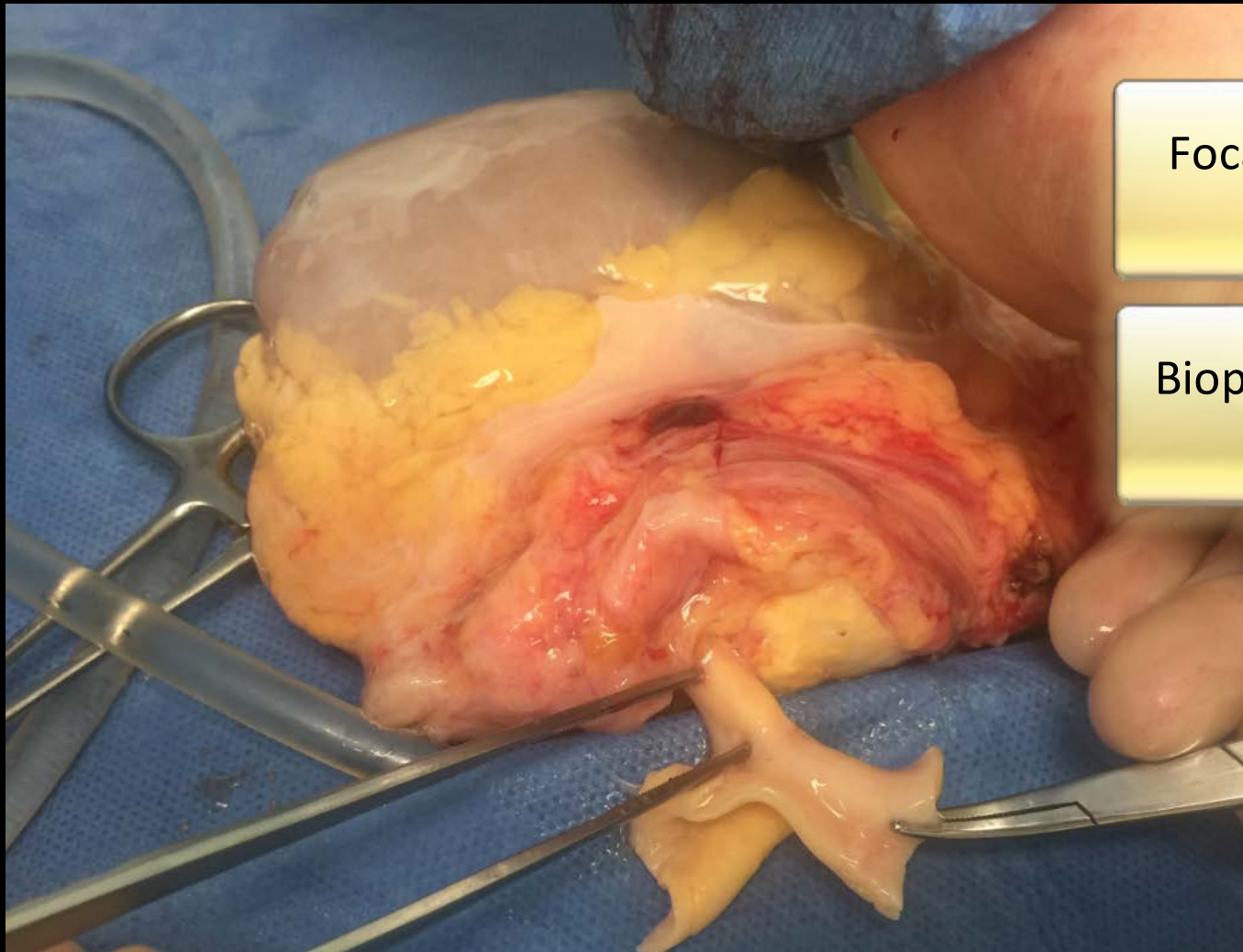
## Give every offer a chance!

My phone at 3AM:

Primary KI offer:  
50s yo donor, normal Cr,  
declined for HARD arterial  
plaque

The alternative answer:

Let's take a look



Focal hard plaque, art  
otherwise soft

Biopsy excellent and Cr  
normal

## My recipient: ~60yo patient

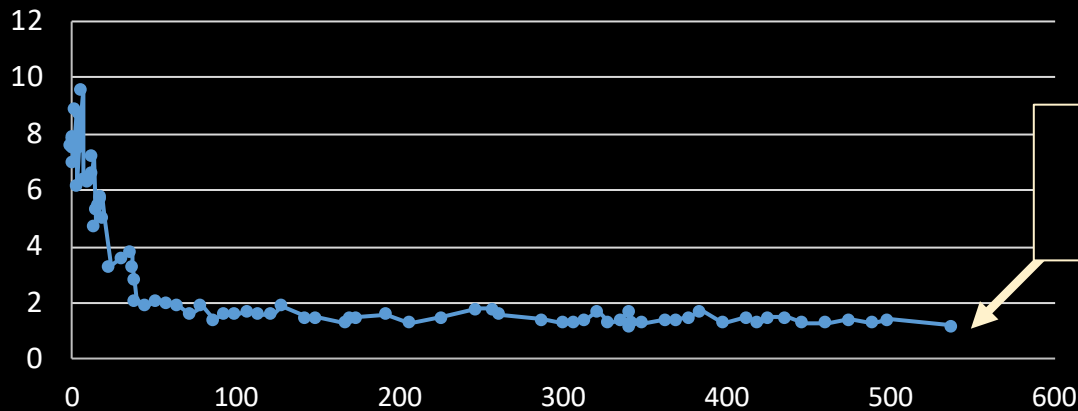
Recently failed prior  
transplant (20+yrs)

Exhausted vasc access



Chance of dying on WL  
>>>  
Chance of getting an  
"ideal" offer

Serum Cr over time since transplant



Current Cr:  
1.2 mg/dl

## Give every offer a chance!

My phone at 3AM:

Primary KI offer:  
50s yo donor, Cr normal,  
declined for surgical damage –  
artery transected

The easy answer:

No, thanks.

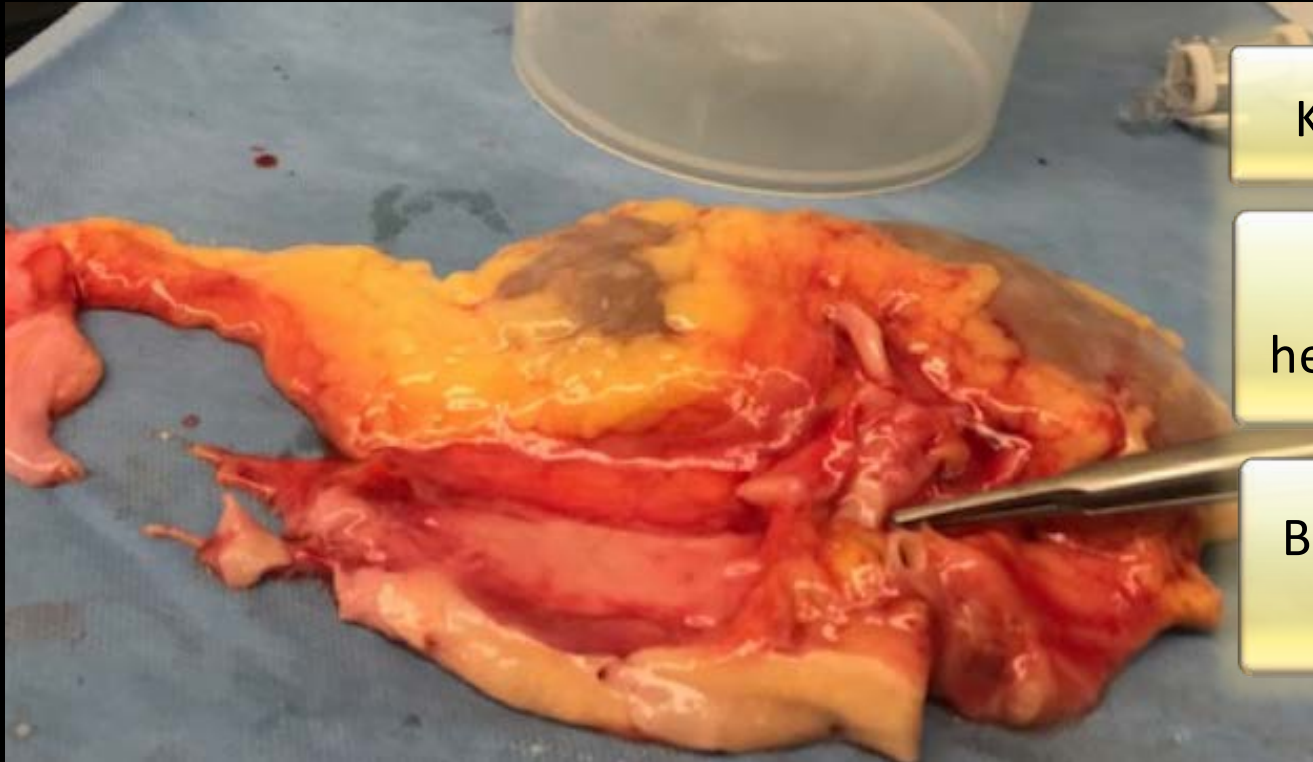
## Give every offer a chance!

My phone at 3AM:

Primary KI offer:  
50s yo donor, Cr normal,  
declined for surgical damage –  
artery transected

The alternative answer:

Let's take a look



Kidney grossly normal

Transected artery  
healthy and with plenty  
of length

Biopsy excellent and Cr  
normal

**My recipient: ~60yo patient**

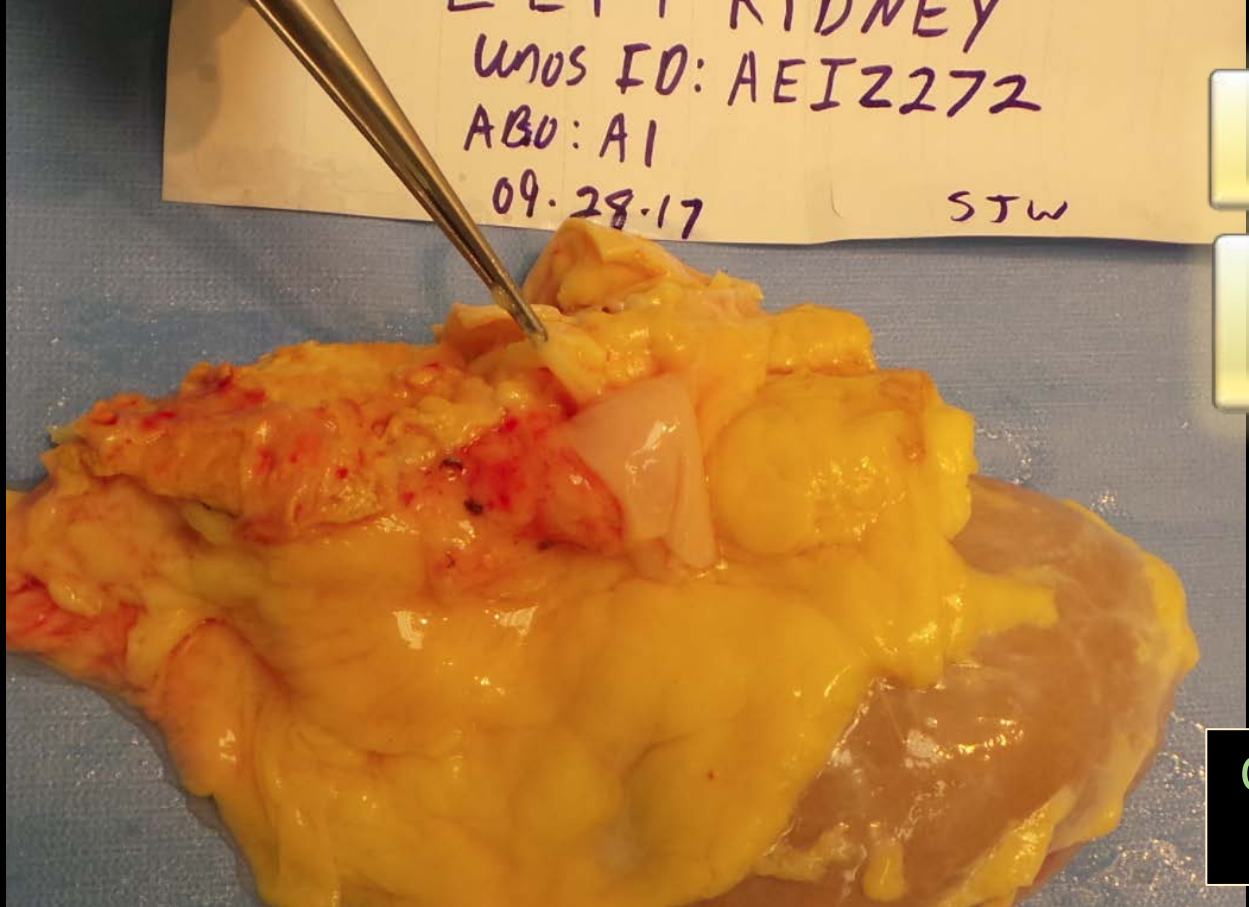
DM, CAD

On HD <2 years



Chance of dying on WL  
>>>  
Chance of getting an  
“ideal” offer

Current Cr 9 months post-op:  
1.1 mg/dl



LEFT KIDNEY  
UNOS ID: AEI2272  
ABO: A1  
09.28.17 STW

NGS  
2 arteries, 1 transected

Bx excellent and Cr  
normal

Current Cr 3 yrs post-op:  
1.5 mg/dl

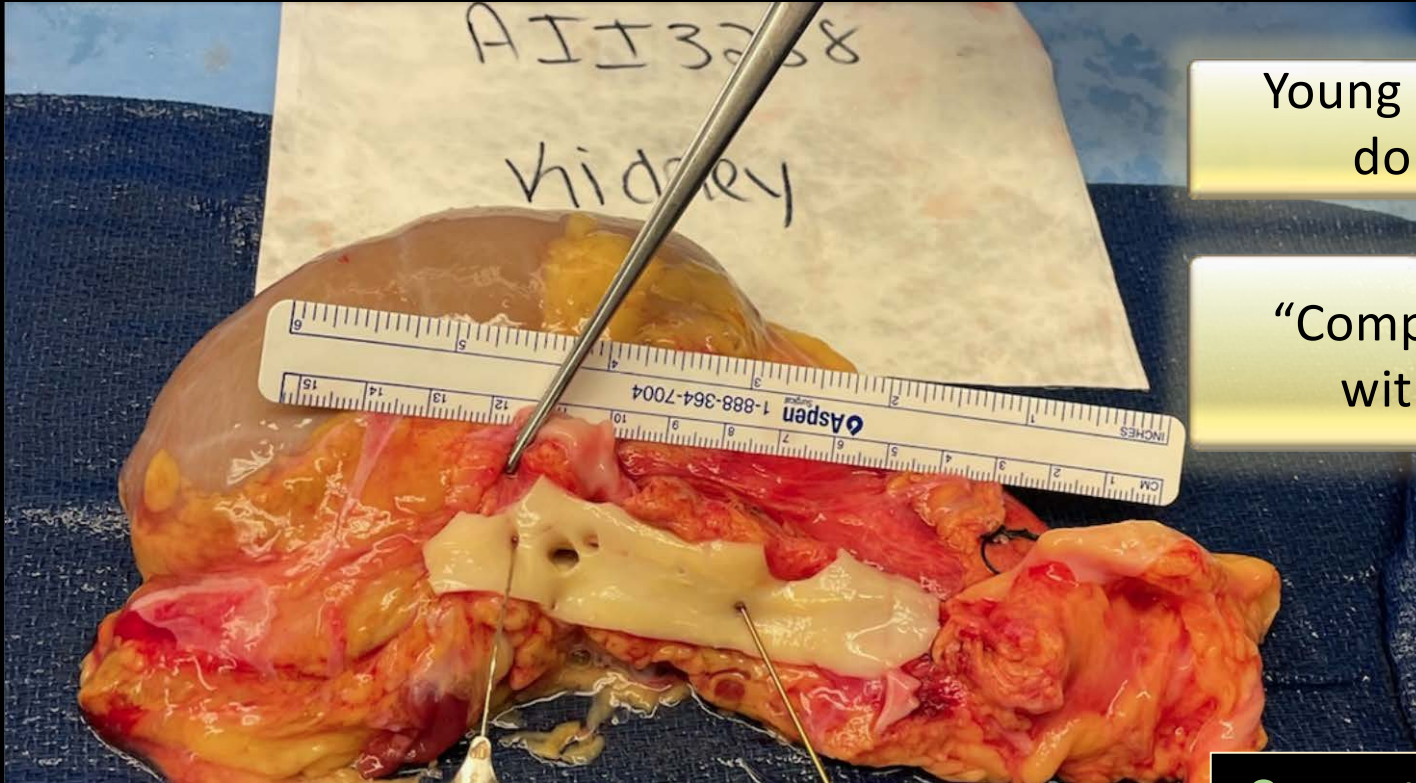




Pediatric donor (<10yo)

Artery transected at procurement

Current Cr 1yr post-op:  
0.9 mg/dl



Young otherwise ideal donor (<20yo)

“Complex anatomy”  
with 4 arteries

Current Cr 1mo post-op:  
0.9 mg/dl

## Give every offer a chance!

My phone at 3AM:

Primary KI offer:  
40s yo DCD donor, normal Cr,  
declined due to 90 min WIT

The alternative answer:

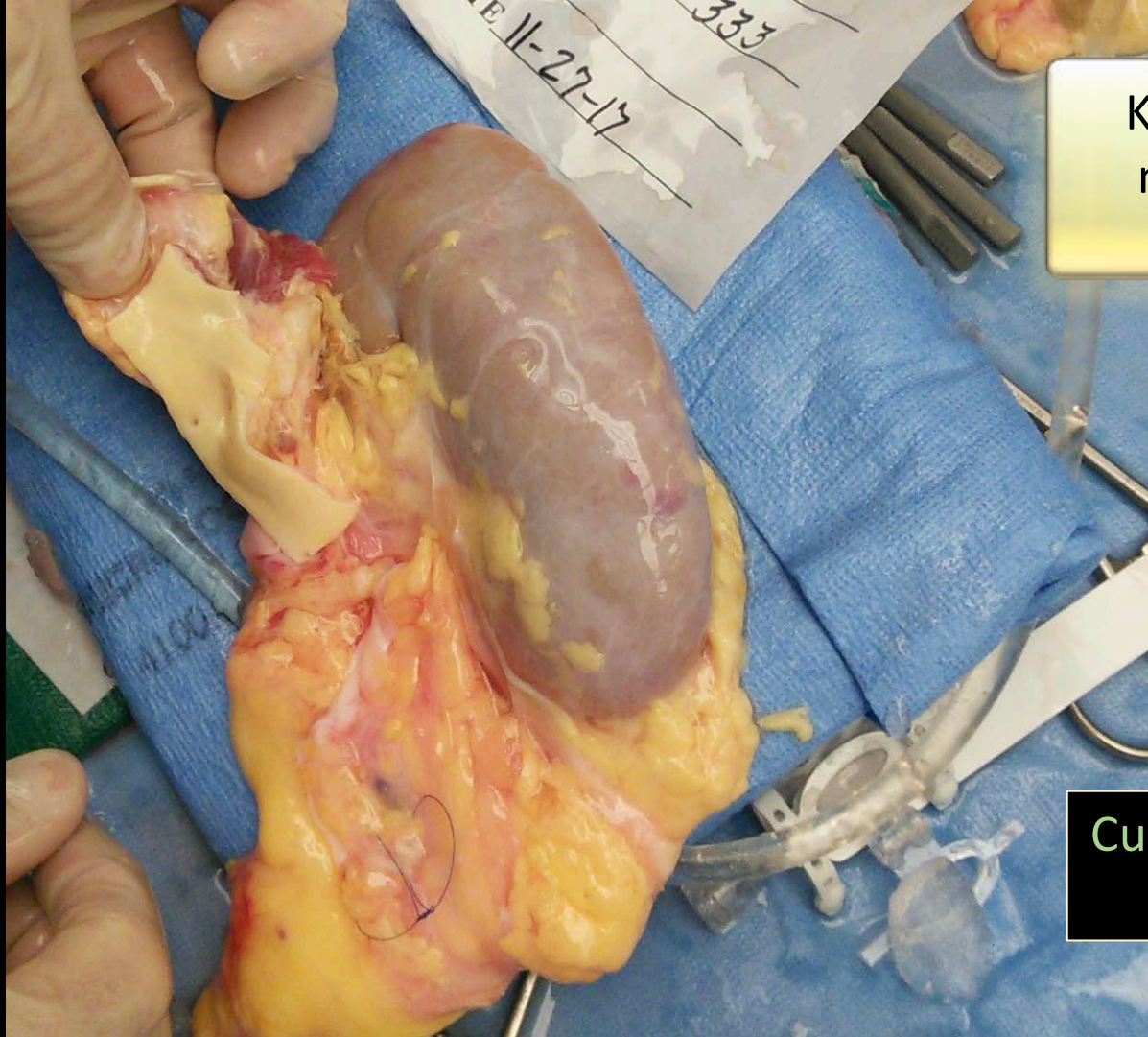
Let's see DCD flowsheet

**Vital Sign**

Time	Hr	Bp	Map
11:00	82	144/78	76
11:01	82	144/78	76
11:02	75	182/88	119
11:03	70	276/117	169
11:04	68	266/113	171
11:05	67	271/109	166
11:06	65	277/113	161
11:07	67	261/109	166
11:08	70	261/108	162
11:09	60	269/110	167
11:10	68	267/105	160
11:11	61	282/112	167
11:12	105	208/147	187
11:13	83	251/162	186
11:14	77	271/103	153
11:15	82	266/101	150
11:16	82	261/99	148
11:17	81	255/101	148
11:18	82	248/100	145
11:19	86	240/101	142
11:20	92	236/98	141
11:21	99	266/98	139
11:22	99	227/100	140
11:23	98	229/98	138
11:24	103	223/94	135
11:25	105	222/96	134
11:26	104	218/91	133
11:27	105	211/91	131
11:28	105	219/93	131
11:29	106	205/90	130
11:30	107	205/91	127
11:31	111	194/89	122
11:32	112	192/97	124
11:33	113	187/90	120
11:34	112	185/88	119
11:35	114	183/88	119

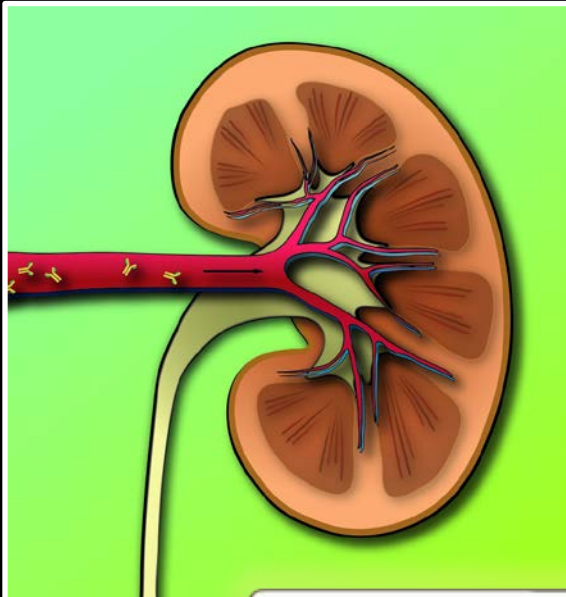
Vital signs were  
NORMAL for 70 of 90  
minutes





Kidney anatomically normal and Bx was excellent

Current Cr >3yrs post-op:  
0.85 mg/dl



## Supply vs Demand

Not every kidney is usable, but sometimes you'll be surprised if you take the time to look closer

Knowing your waiting list helps

We can all do our part to reduce discard of usable kidneys

# Q&As – 5 Minutes



# Case Study #1





# Transplant

- Michael Guthrie LMSW 2002
    - Durant DaVita
    - Family Advocacy
  - Mental Health Therapist Alaska and South Dakota
    - 2012 Dialysis Social Worker
    - 2017-2020 think tank to expand home modality
- Improving patient outcomes by non-traditional complimentary interventions

A hand holding a kidney. The hand is rendered in a soft, sketchy style with light skin tones. The kidney is a realistic reddish-brown color with a lighter hilum. The background is a circular, decorative pattern of small, colorful floral or leaf-like motifs in shades of blue, green, and yellow. The overall image has a soft, ethereal quality.

# Culture of Care Trust and Partnership

Greeting Patients

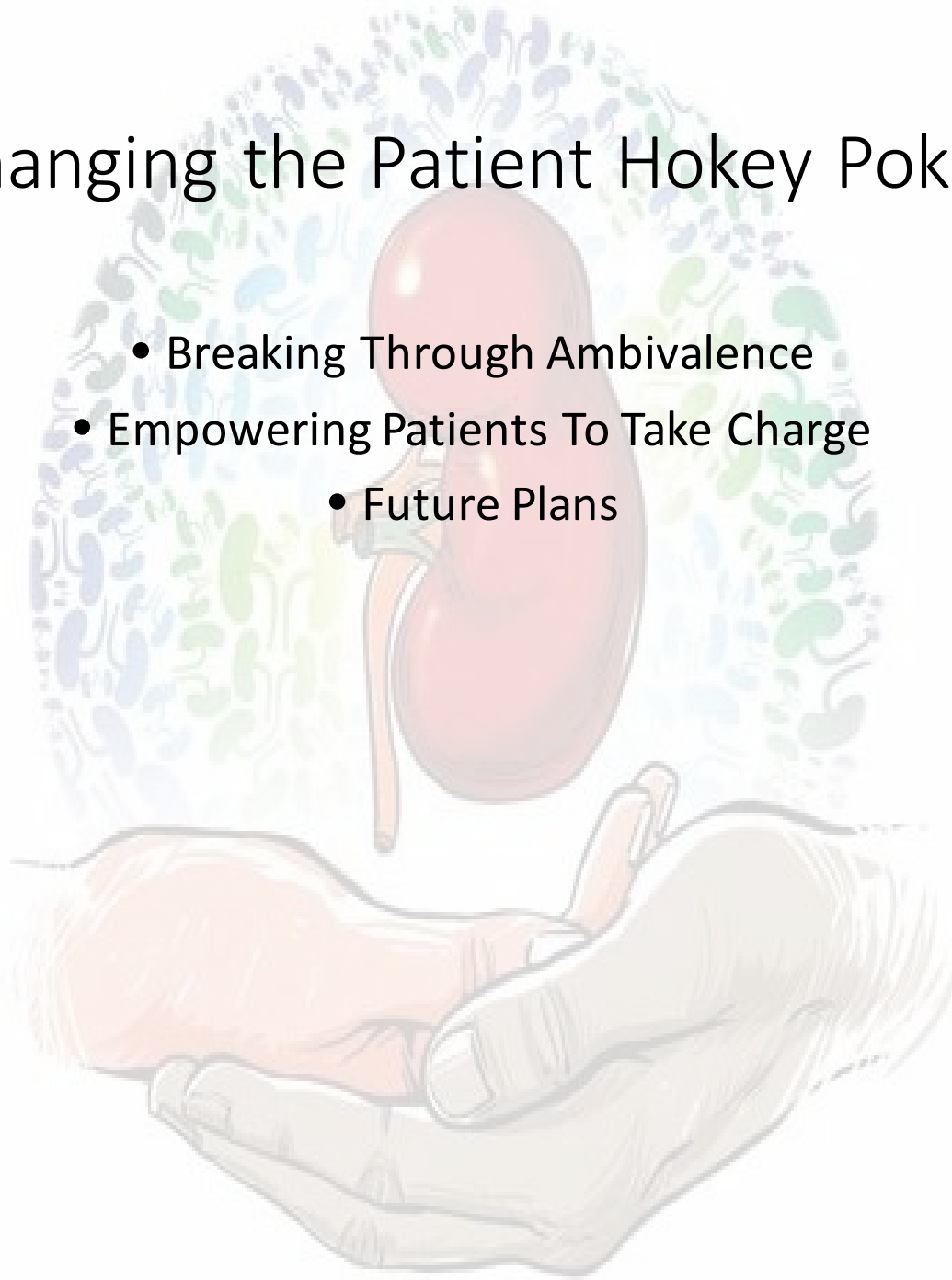
Words Matter

Following Through

Barrier Removal

# Changing the Patient Hokey Pokey

- Breaking Through Ambivalence
- Empowering Patients To Take Charge
  - Future Plans



A central illustration of a human kidney, rendered in a realistic reddish-brown color, is held gently in the palm of a hand. The hand is depicted with soft shading and visible skin texture. The background behind the kidney is a circular, semi-transparent pattern of small, colorful floral or leaf-like motifs in shades of blue, green, and purple. The overall composition is centered and serves as a visual metaphor for care and support in a medical context.

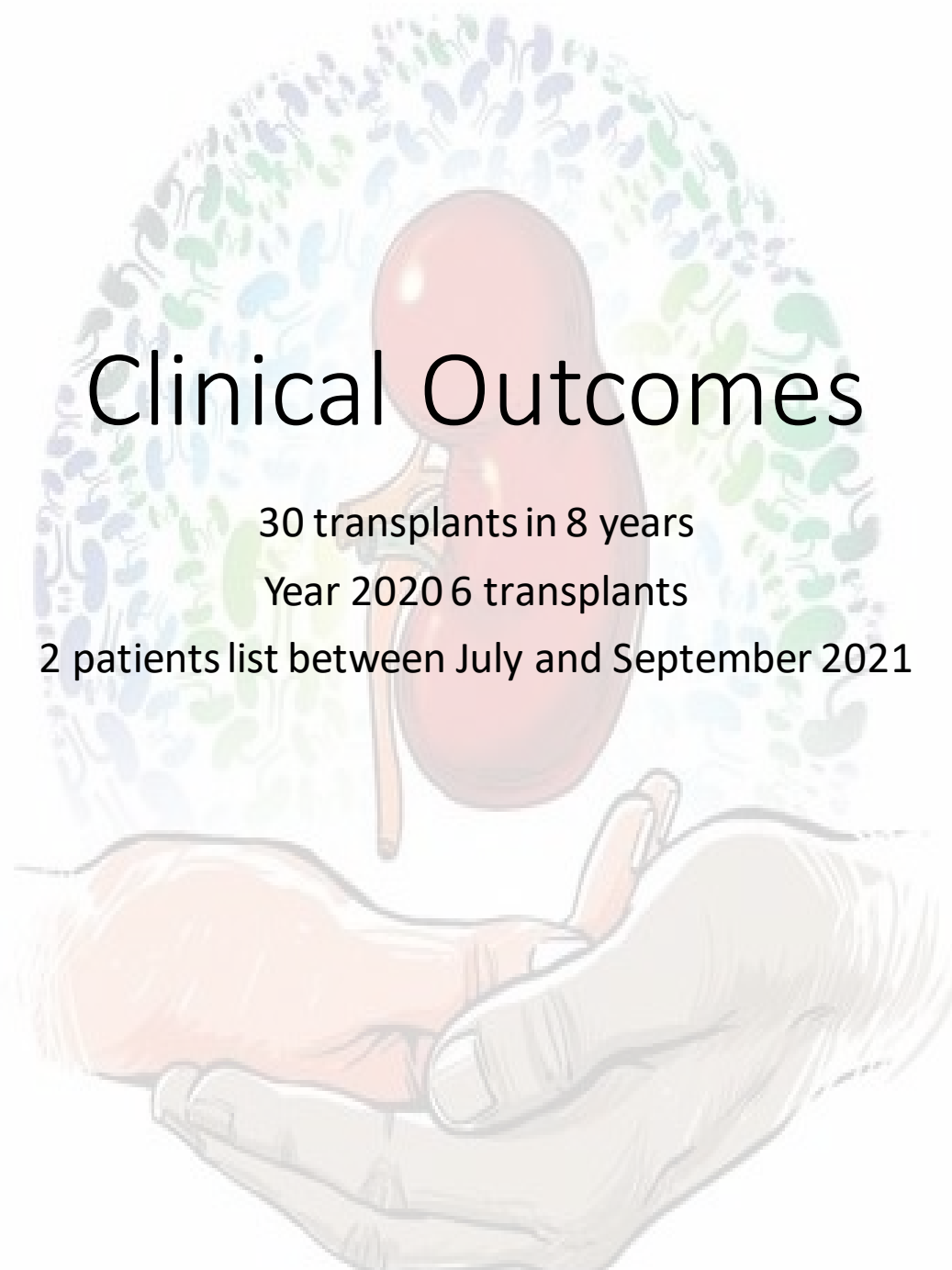
# Community and Area Resources

2 Community Hospital's

No Vascular Center

Undependable Public Transportation

All Transplant Hospitals are at Least 2 hours away.

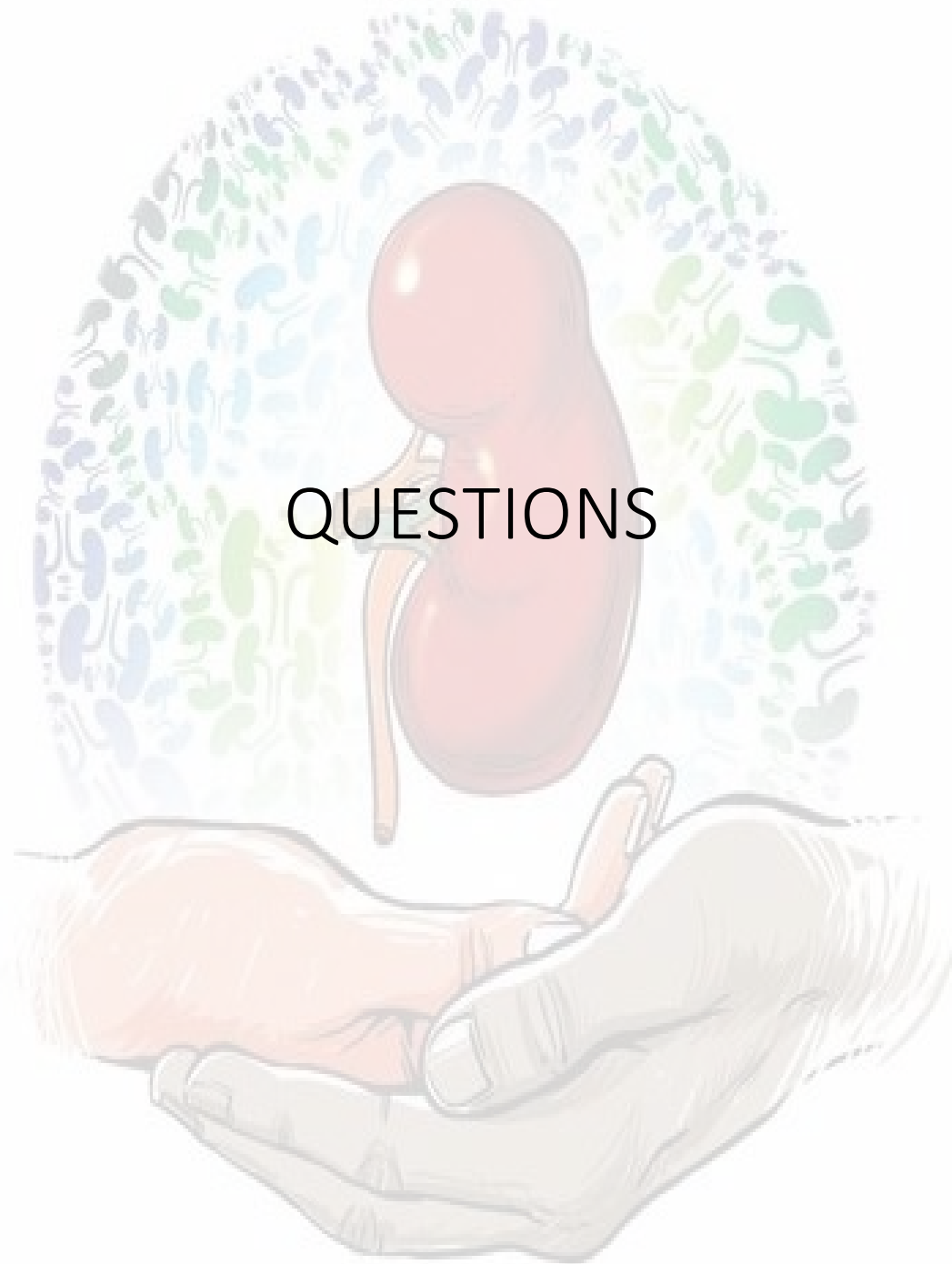
The background features a central illustration of a reddish-brown kidney with its ureter, held gently in a light-skinned hand. Above the kidney is a circular arrangement of numerous smaller, stylized kidneys in various shades of blue, green, and purple, creating a halo effect.

# Clinical Outcomes

30 transplants in 8 years

Year 2020 6 transplants

2 patients list between July and September 2021



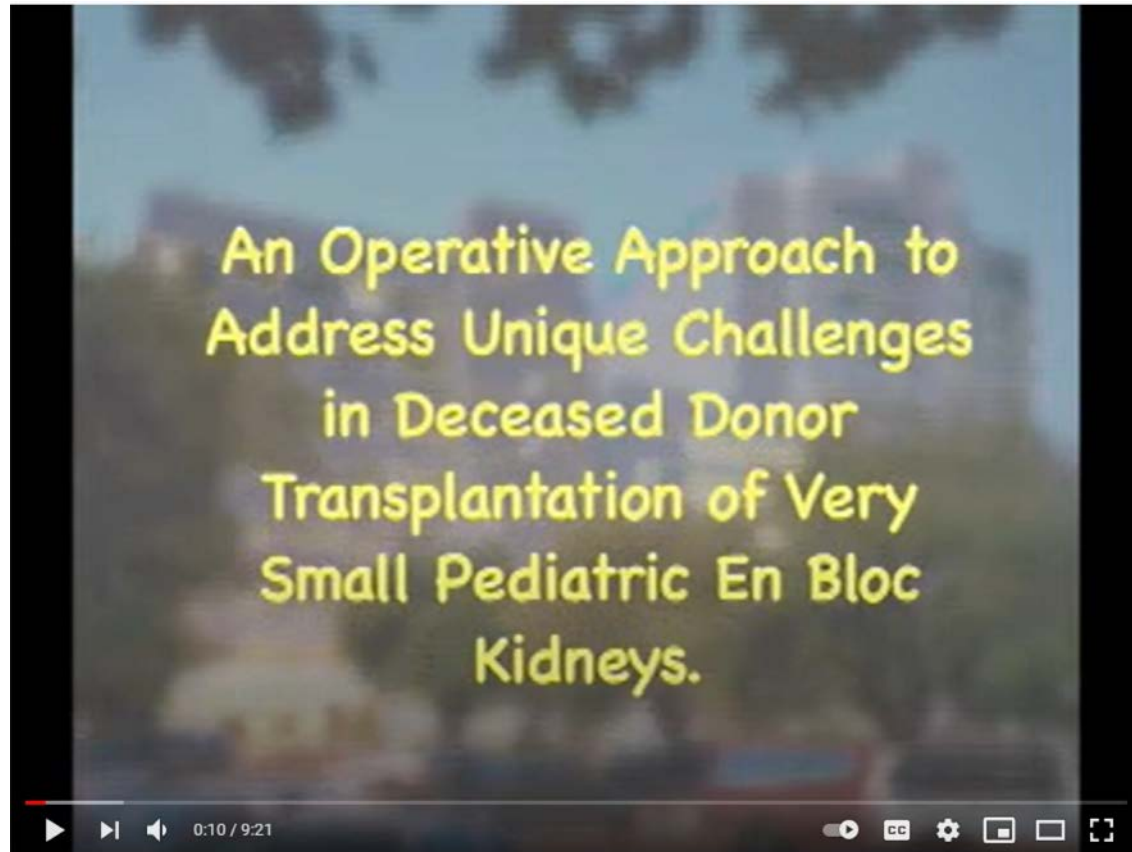
QUESTIONS

# Case Study #2

# **End Stage Renal Disease Treatment Choices Learning Collaborative**

**Richard Perez MD  
University of California Davis  
October 21, 2021**





Pediatric En Bloc Renal Transplant

1,372 views • Nov 13, 2015

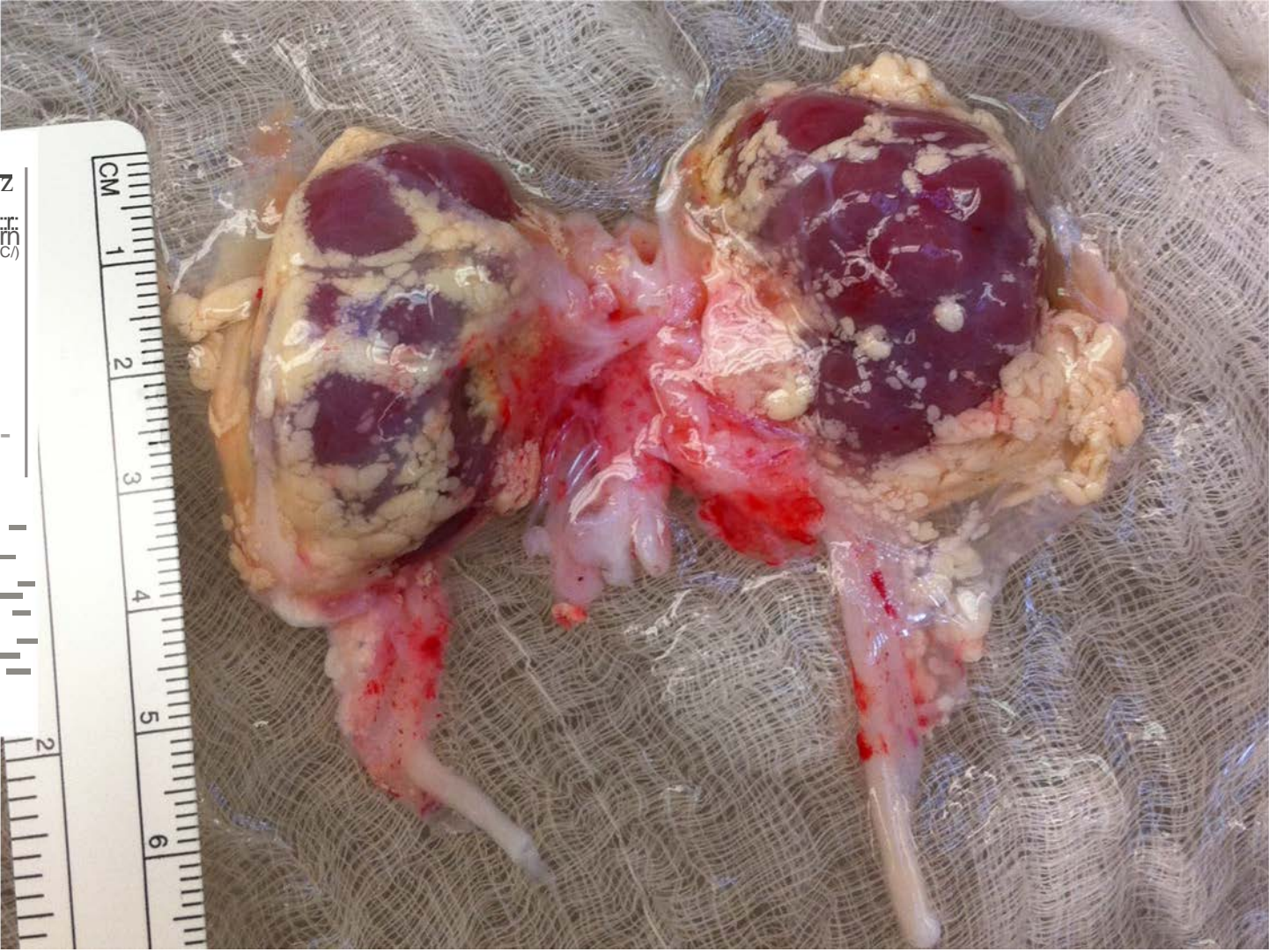
10 c) 1 \_4 SHARE ==+ SAVE

## Case Histories: Kidney Donors

Age/Gender	Weight (kg)	KD PI (%)	CIT (hrs)	OPO	Pump duration (hrs)	Pump duration/flow/resistance	Terminal creatinine (mg/dL)
7 month old DCD	6.0	96	15.0	Local	11.0	37ml/min 0.62	0.12
3 month old BD	6.8	79	28.0	In state	3.0	38 ml/min 0.52	0.57
1 month old BD	5.3	77	25.6	Out of state	11.8	36 ml/min 0.72	0.43

## Case Histories: Kidney Recipients

<b>Age/Gender Weight</b>	<b>PRA%</b>	<b>Waiting time</b>	<b>DGF</b>	<b>Length of stay</b>	<b>Last serum creatinine (mg/dL)</b>
<b>23yo M 47kg</b>	<b>0</b>	<b>3.1 years</b>	<b>No</b>	<b>5 days</b>	<b>1.92</b>
<b>46yo F 73kg</b>	<b>0</b>	<b>4.0 yrs</b>	<b>No</b>	<b>3 days</b>	<b>2.23</b>
<b>61yo M 77.9kg</b>	<b>0</b>	<b>5.6 yrs</b>	<b>No</b>	<b>4 days</b>	<b>4.69</b>



N HES

CM 1 2 3 4 5 6

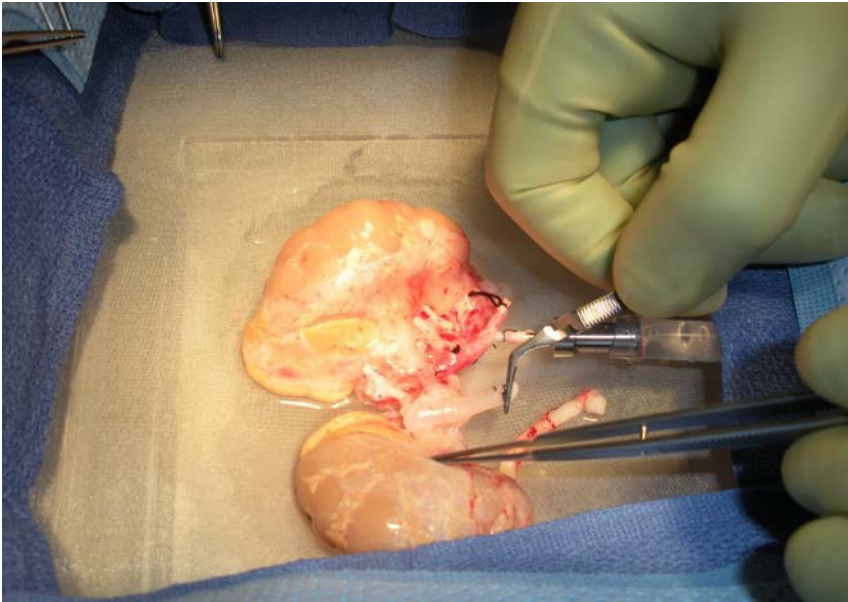
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## Hypothermic Pulsatile Perfusion of Small Pediatric en Bloc Kidneys: Technical Aspects and Outcomes

We read with interest the case report by Zendejas et al. (1) on hypothermic pulsatile perfusion (PP) of a pediatric en

position. Such acute gravity-related effects are not observed with kidneys from larger donors.

sate at least partially for any potential graft rewarming during the more extensive backtable procedures required by en



**Troppmann et. al, Transplantation  
2009**

# Short- and Long-term Outcomes of Kidney Transplants From Very Small ( $\leq 15$ kg) Pediatric Donors With Acute Kidney Injury

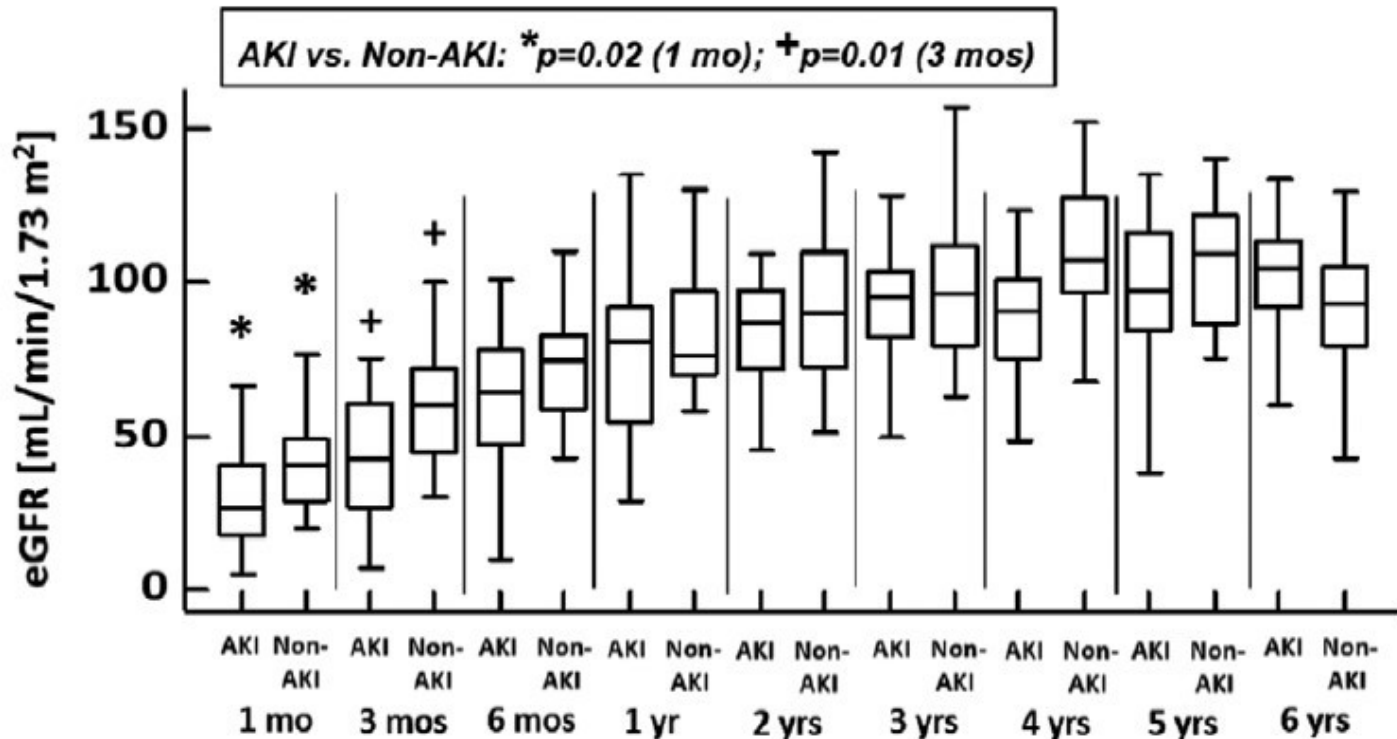
Christoph Troppmann, MD,<sup>1</sup> Chandrasekar Santhanakrishnan, MD,<sup>1</sup>  
Ghaneh Fananapazir, MD,<sup>2</sup> Junichiro Sageshima, MD,<sup>1</sup> Kathrin M. Troppmann, MD,<sup>1</sup> and  
Richard V. Perez, MD<sup>1</sup>

**Background.** Kidneys from small deceased pediatric donors with acute kidney injury (AKI) are commonly discarded owing to transplant centers' concerns regarding potentially inferior short- and long-term posttransplant outcomes. **Methods.** We retrospectively analyzed our center's en bloc kidney transplants performed from November 2007 to January 2015 from donors  $\leq 15$  kg into adult recipients ( $\geq 18$  y). We pair-matched grafts from 27 consecutive donors with AKI versus 27 without AKI for donor weight, donation after circulatory death status, and preservation time. **Results.** For AKI versus non-AKI donors, median weight was 7.5 versus 7.1 kg; terminal creatinine was 1.7 (range, 1.1–3.3) versus 0.3 mg/dL (0.1–0.9). Early graft loss rate from thrombosis or primary nonfunction was 11% for both groups. Delayed graft function rate was higher for AKI (52%) versus non-AKI (15%) grafts ( $P = 0.004$ ). Median estimated glomerular filtration rate was lower for AKI recipients only at 1 and 3 months ( $P < 0.03$ ). Graft survival (death-censored) at 8 years was 78% for AKI versus 77% for non-AKI grafts. Late proteinuria rates for AKI versus non-AKI recipients with  $>4$  years follow-up were not significantly different. **Conclusions.** Small pediatric donor AKI impacted early posttransplant kidney graft function, but did not increase risk for early graft loss and decreased long-term function. The presently high nonutilization rates for en bloc kidney grafts from very small pediatric donors with AKI appear therefore unjustified. Based on the outcomes of the present study, we infer that the reluctance to transplant single kidneys from larger pediatric donors with AKI lacks a rational basis as well. Our findings warrant further prospective study and confirmation in larger study cohorts.

(*Transplantation* 2021;105: 430–435).

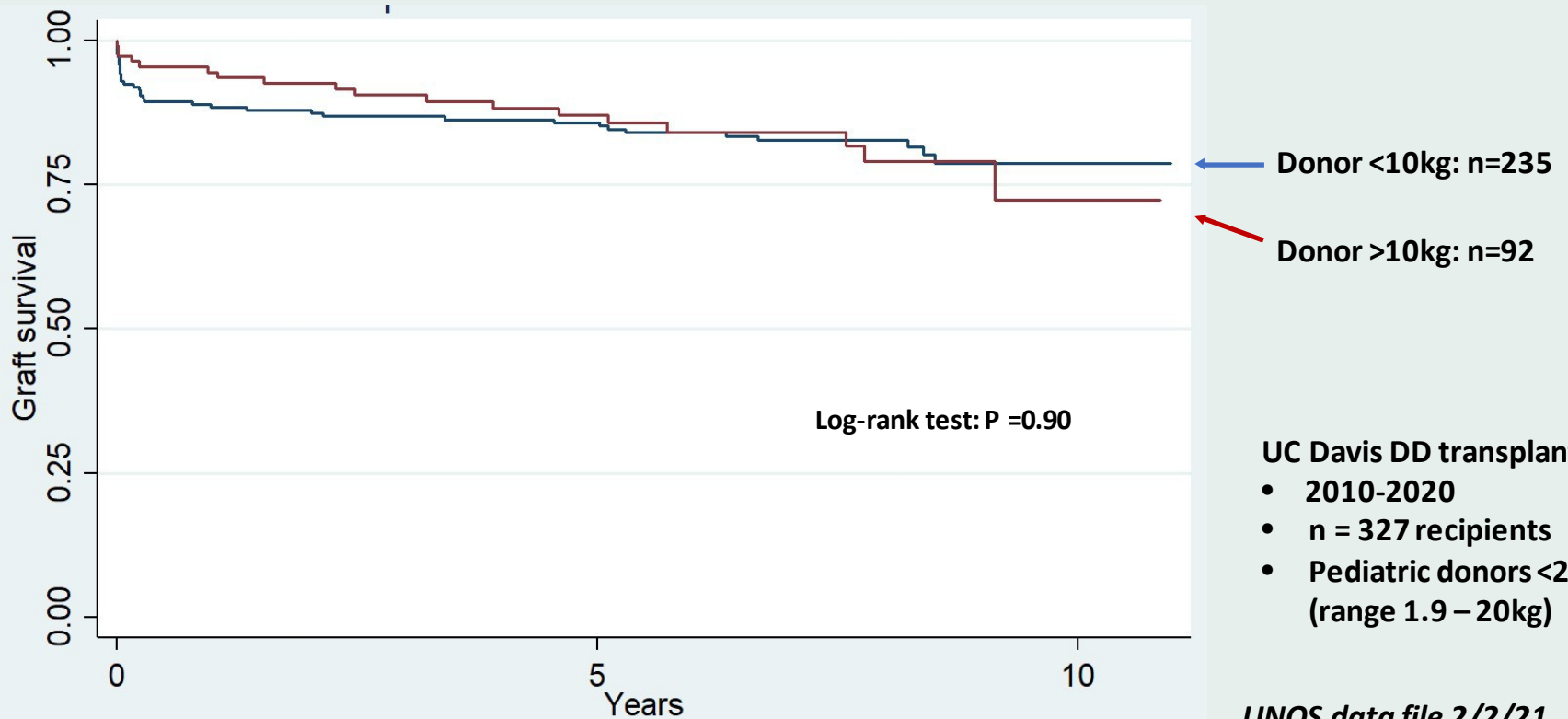
Troppmann et al., *Transplantation* 2021

# Gradual improvement of allograft function over 3 years in kidneys from small pediatric donors with AKI



Troppmann et al., Transplantation 2021

## A Decade of Pediatric Donor Transplants at UCD: Excellent long term graft survival





# Q&As – 5 Minutes



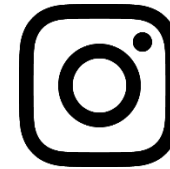
# Recap & Next Steps

- Top take-aways
- I like, I wish, I will
- Additional pathways for learning
- Event evaluation

# Social Media



ESRD National Coordinating Center



@esrd\_ncc



@esrdncc



ESRD NCC | End Stage Renal Disease  
National Coordinating Center (NCC)



Expert Teams – Case-Based Learning & Mentorship

# Thank You

Kelly M. Mayo  
[kmayo@hsag.com](mailto:kmayo@hsag.com)  
813-865-3552

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