

Expert Teams – Transplantation

Case-Based Learning & Mentorship

Thursday, January 20, 2022

Facilitator: Julie Moss, ESRD National Coordinating Center



Meeting Logistics

- Call is being recorded and will be posted to 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 – Transplantation
- Guest Expert –
 - Bonnie Lonze, MD, PhD, NYU Langone (NY)
- Case Study Presenter –
 - Andrew D. Howard, MD, Forum of ESRD Networks (CA)
- High Performing Organizations
- ESRD Networks
- Centers for Medicare & Medicaid Services (CMS)



Questions to Run On



How Might We ...

- Educate differently to increase the use of high KDPI kidneys?
- Utilize telemedicine to improve patient access to kidney transplantation?
- Identify and develop unique strategies to continue increasing kidney transplantation during COVID?

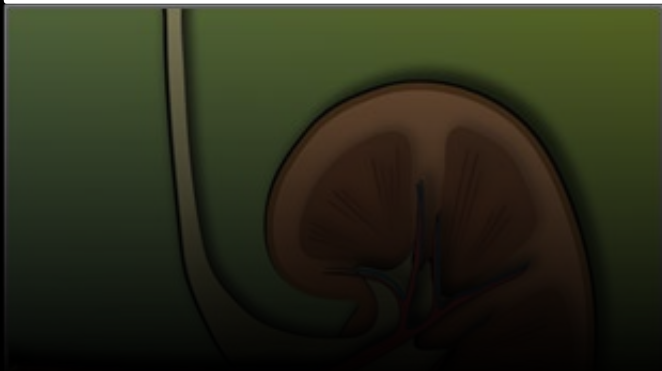
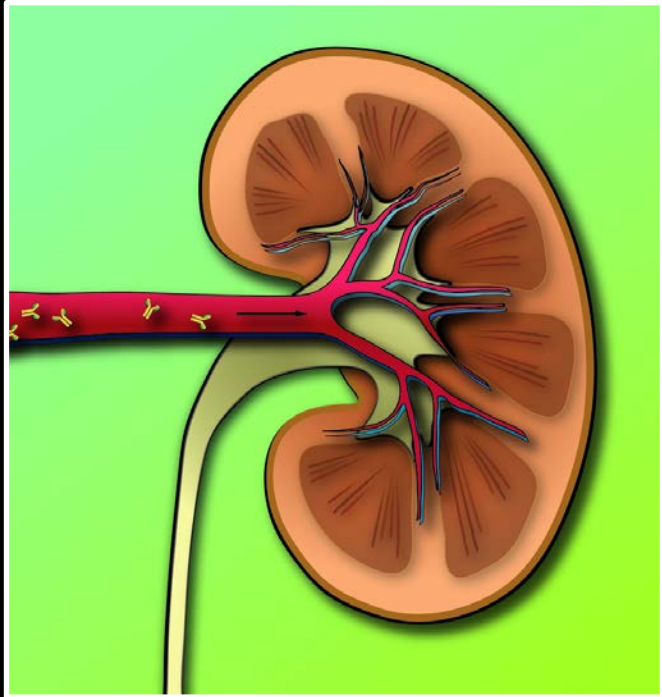
Presentation by Guest Expert



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 is on the right. The sky is overcast with grey clouds. A semi-transparent white box with a thin border is positioned in the upper-left area, containing the title text.

Giving Every Organ a Chance: High Creatinine Kidneys

**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)

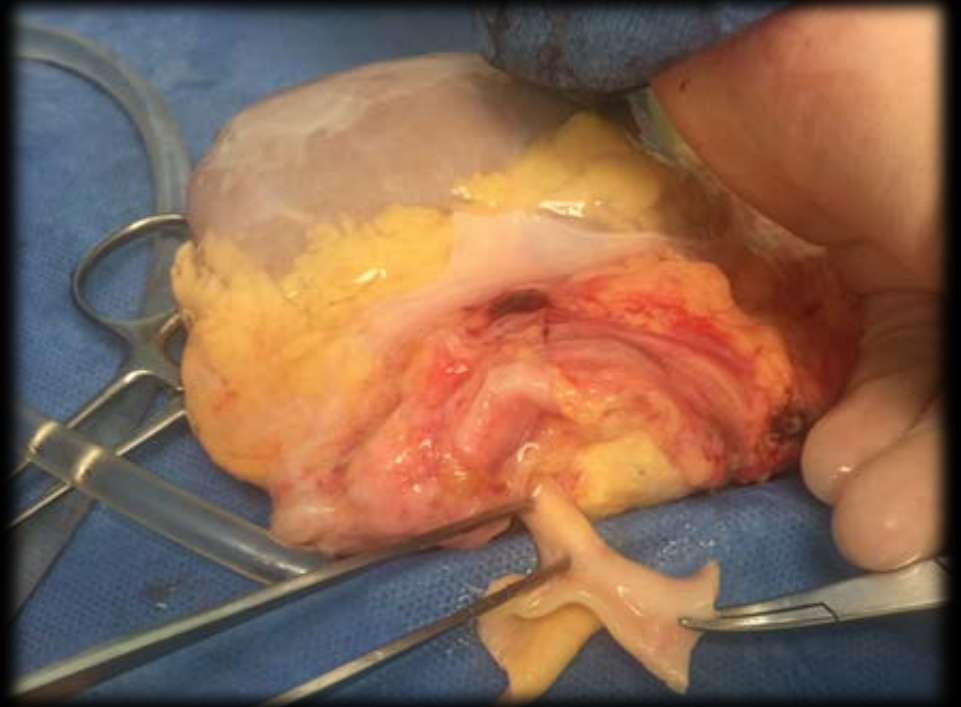


HIV+ donors

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

Defining “less than ideal”

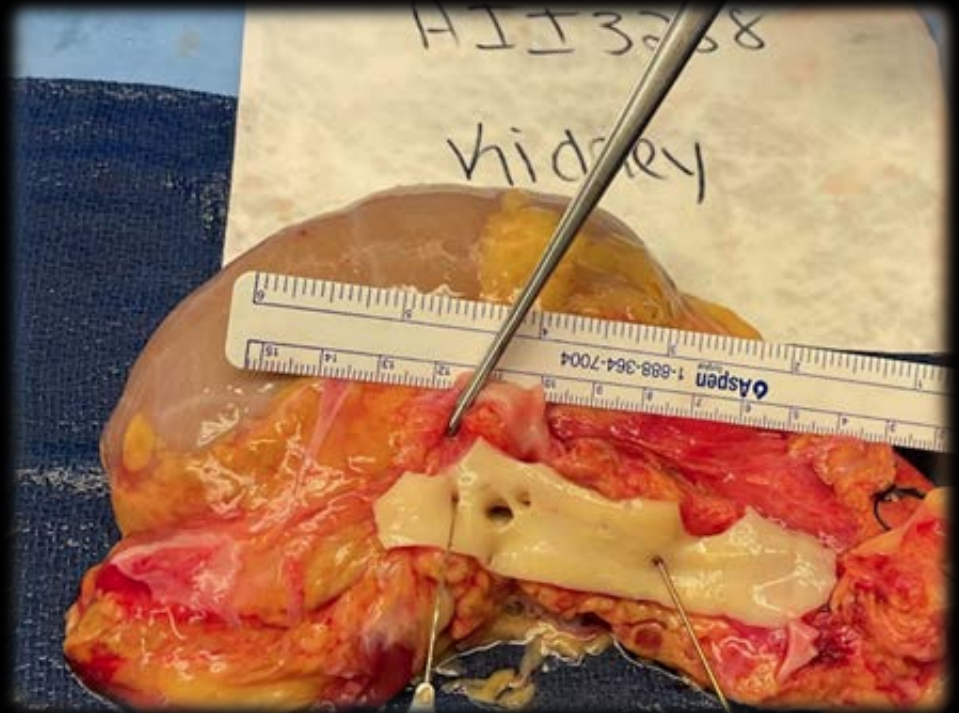
Anatomic abnormalities



Defining “less than ideal”

Anatomic abnormalities

Complex anatomy

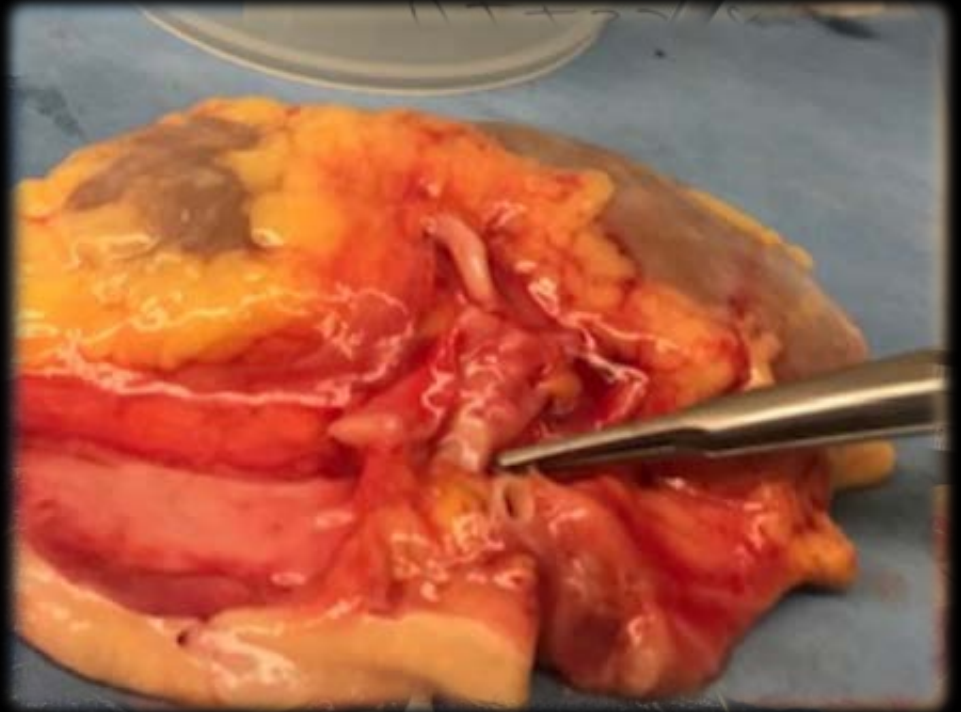


Defining “less than ideal”

Anatomic abnormalities

Complex anatomy

Surgical injury



Defining “less than ideal”

Anatomic abnormalities

Complex anatomy

Surgical injury

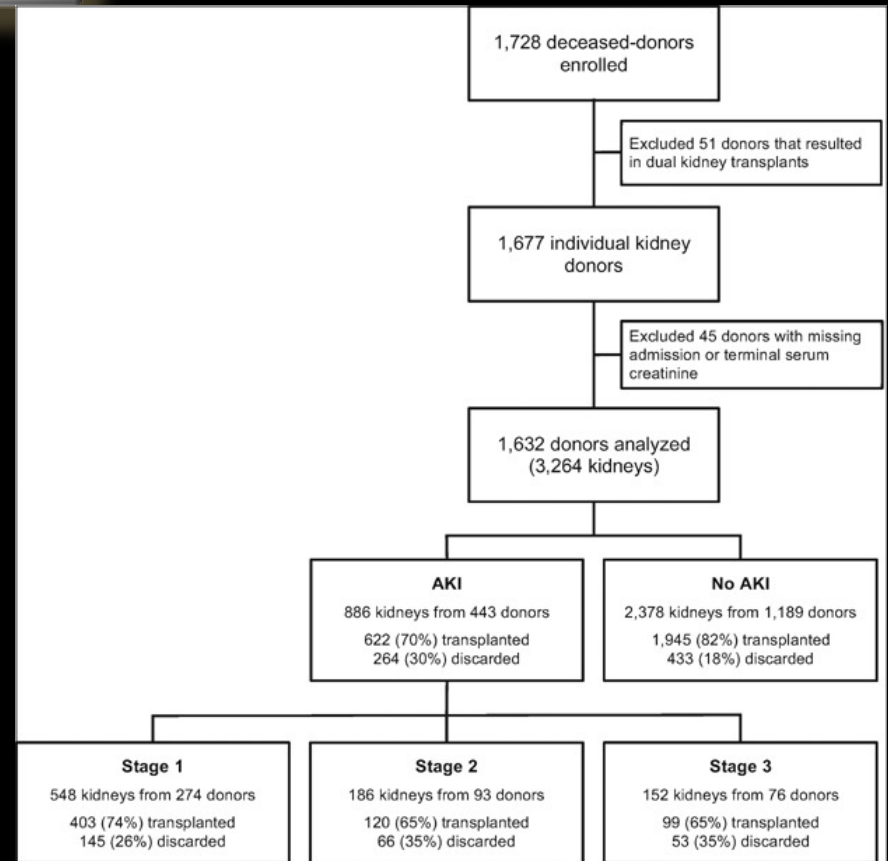
Renal dysfunction



Lots of literature...

Hall et al, AJT 2015

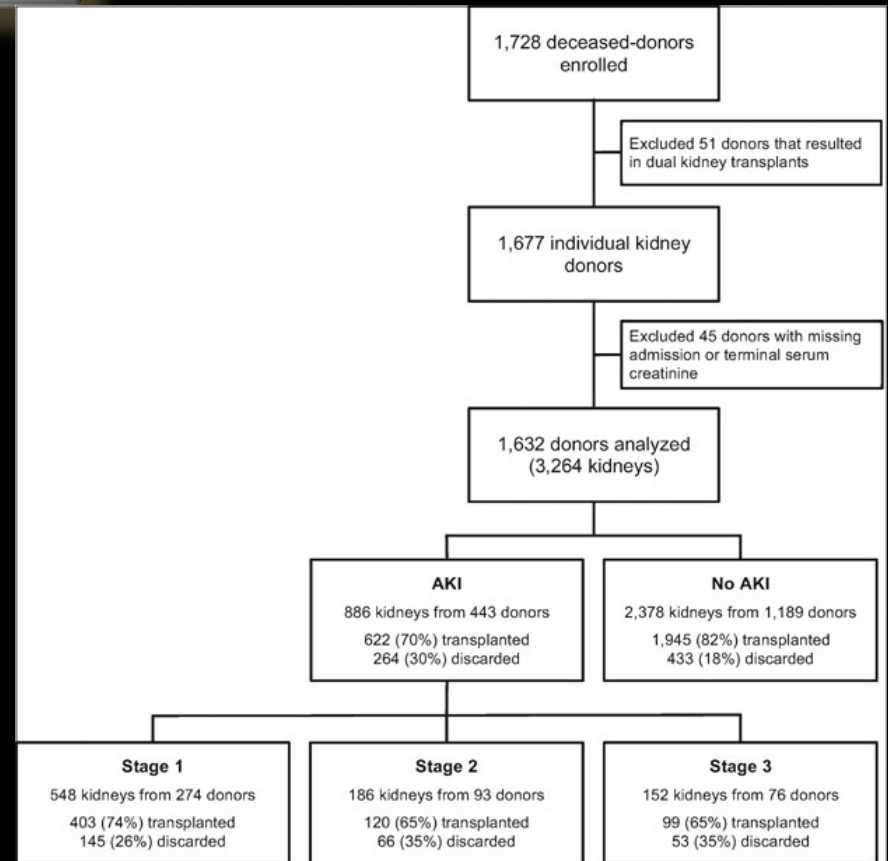
Stage I: 1.5 to <2x increase in Cr
Stage II: 2 to <3x increase in Cr
Stage III: 3x increase or SCr >4



Lots of literature...

Hall et al, AJT 2015

Stage I: 1.5 to <2x increase in Cr
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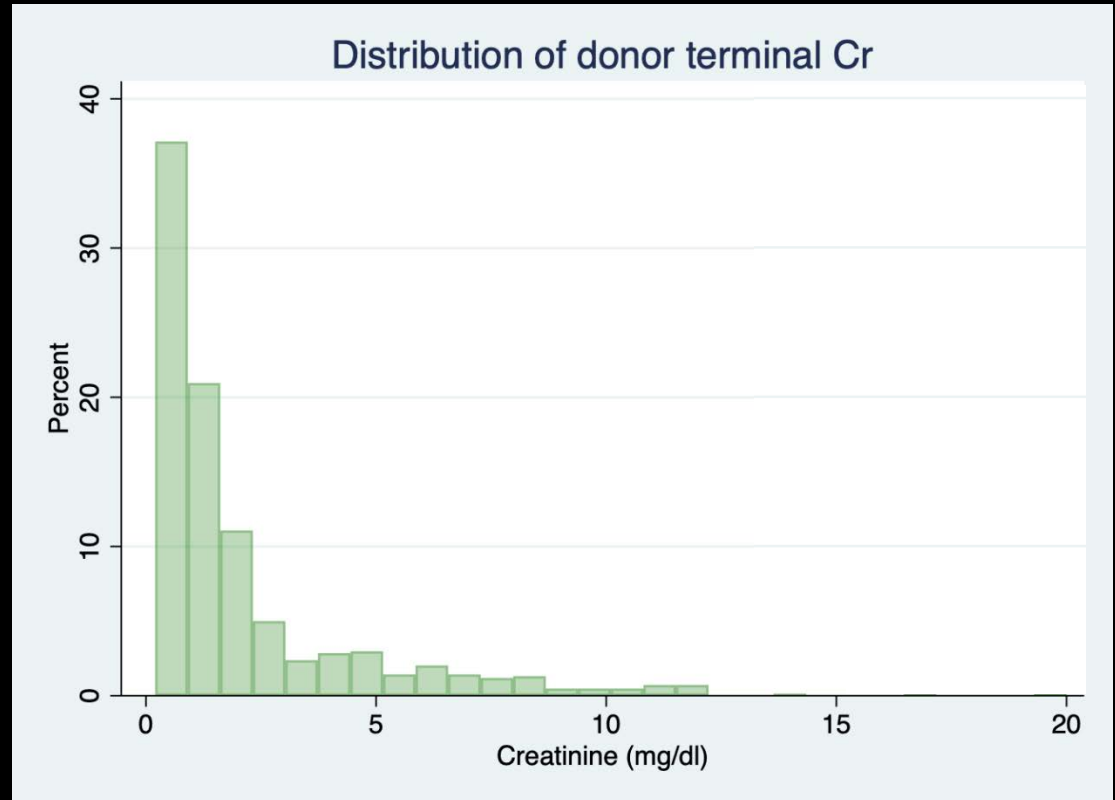
Overall assessment of outcomes

Outcome	Overall effect of donor AKI on outcome ^a	No. of studies with outcome (N=36) (references)		
		Decreased incidence in donor AKI group	No change	Increased incidence in AKI group
Delayed graft function	Increased incidence	0	2 ^(45,46)	23 ^(8,14,24-44)
Acute rejection	No effect	0	9 ^(27,37,41-43,45-48)	0
Graft function (eGFR, sCr)	No effect	2 ^(33,49)	20 ^(8,27,34-42,45-48,50-54)	0
Graft failure	No effect	0	25 ^(7,9,14,24,25,27,28,30-32,34,36-41,44-48,53,55,56)	4 ^(26,29,33,49)
Recipient survival	No effect	0	14 ^(7,24,32,37-41,43,45-48,53)	0

Reference group is non-AKI donors.
^aBased on the number of studies demonstrating outcome.
 AKI, acute kidney injury; eGFR, estimated glomerular filtration rate; sCr, serum creatinine.

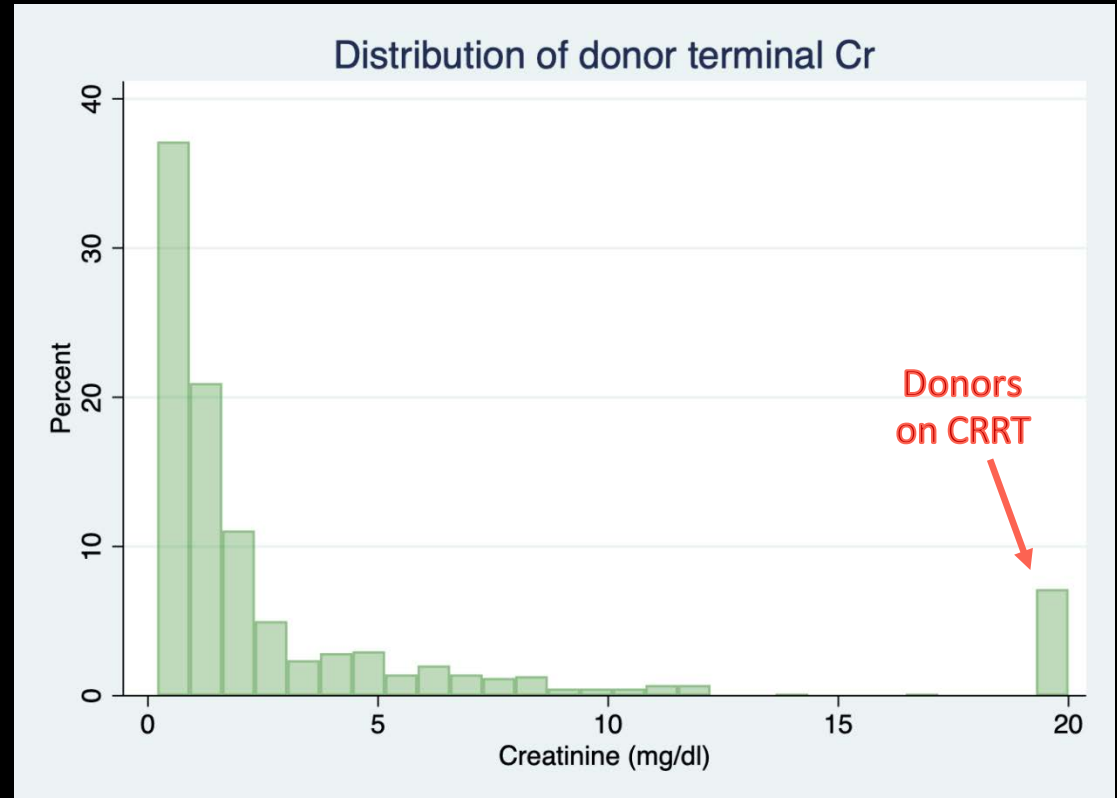
Where do you draw the line with Cr?

Stage I: 1.5 to <2x increase in Cr
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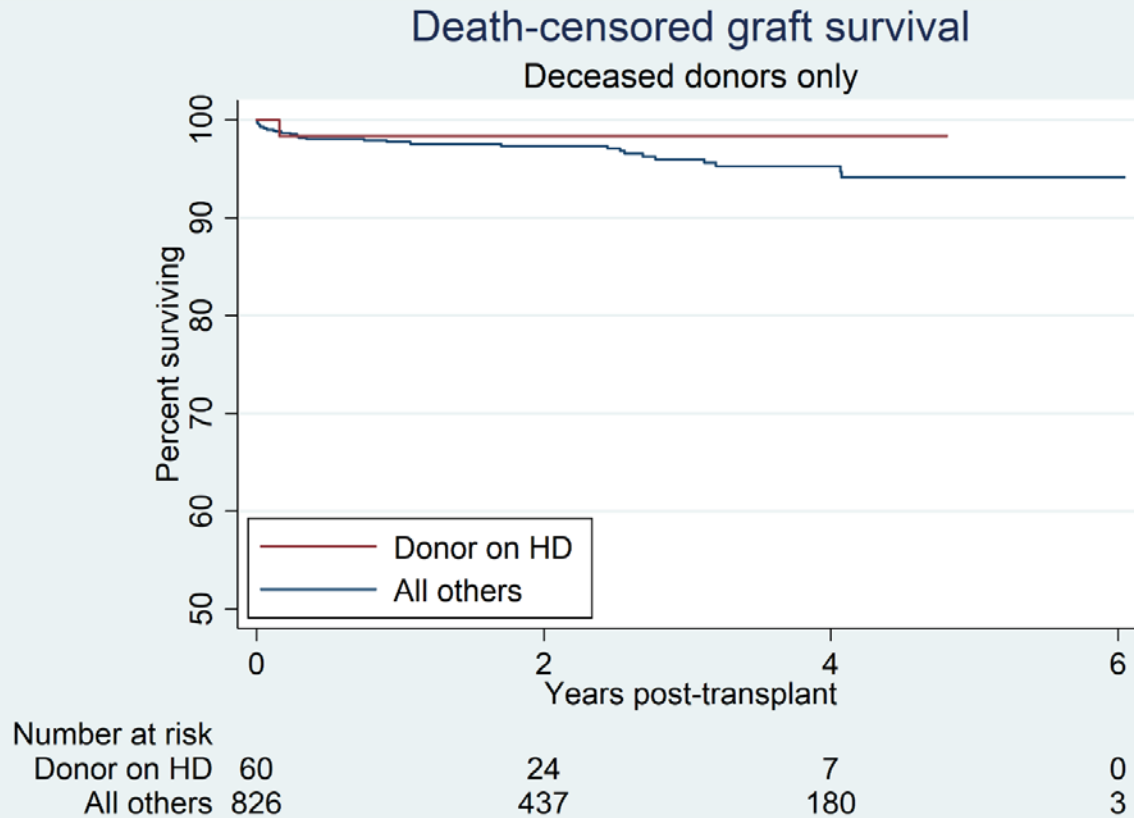


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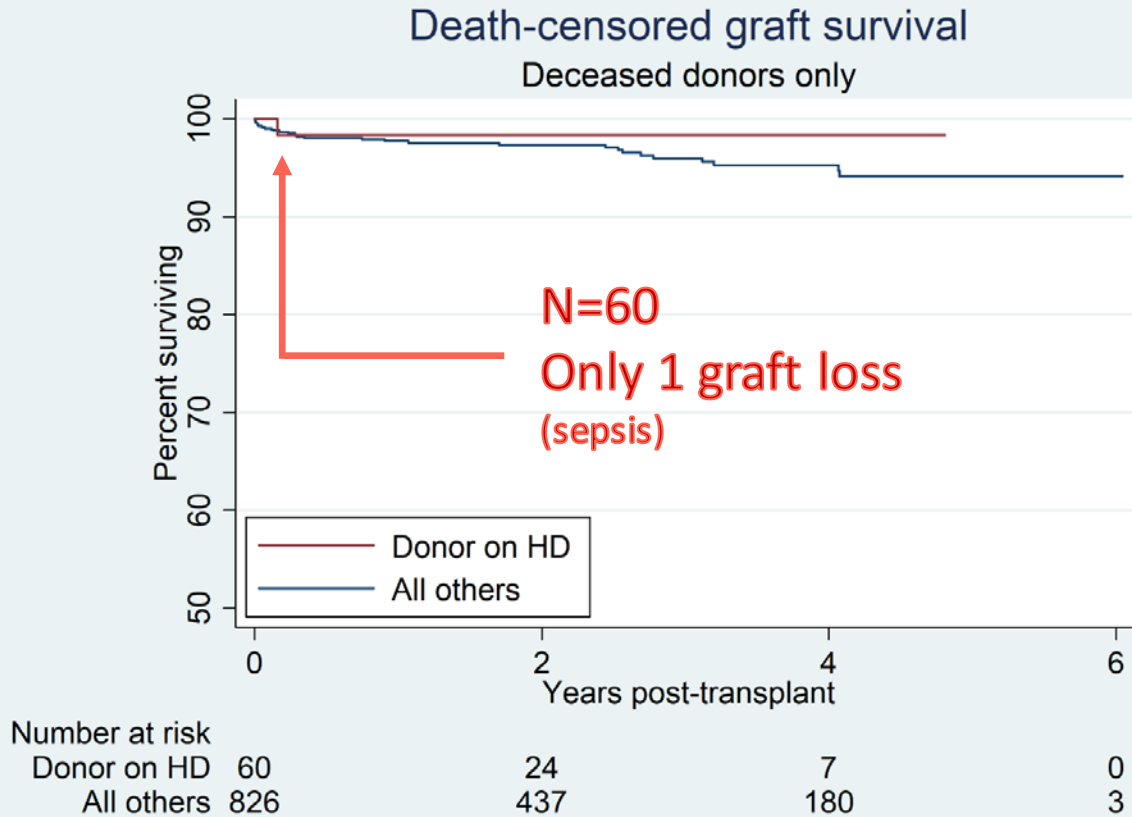
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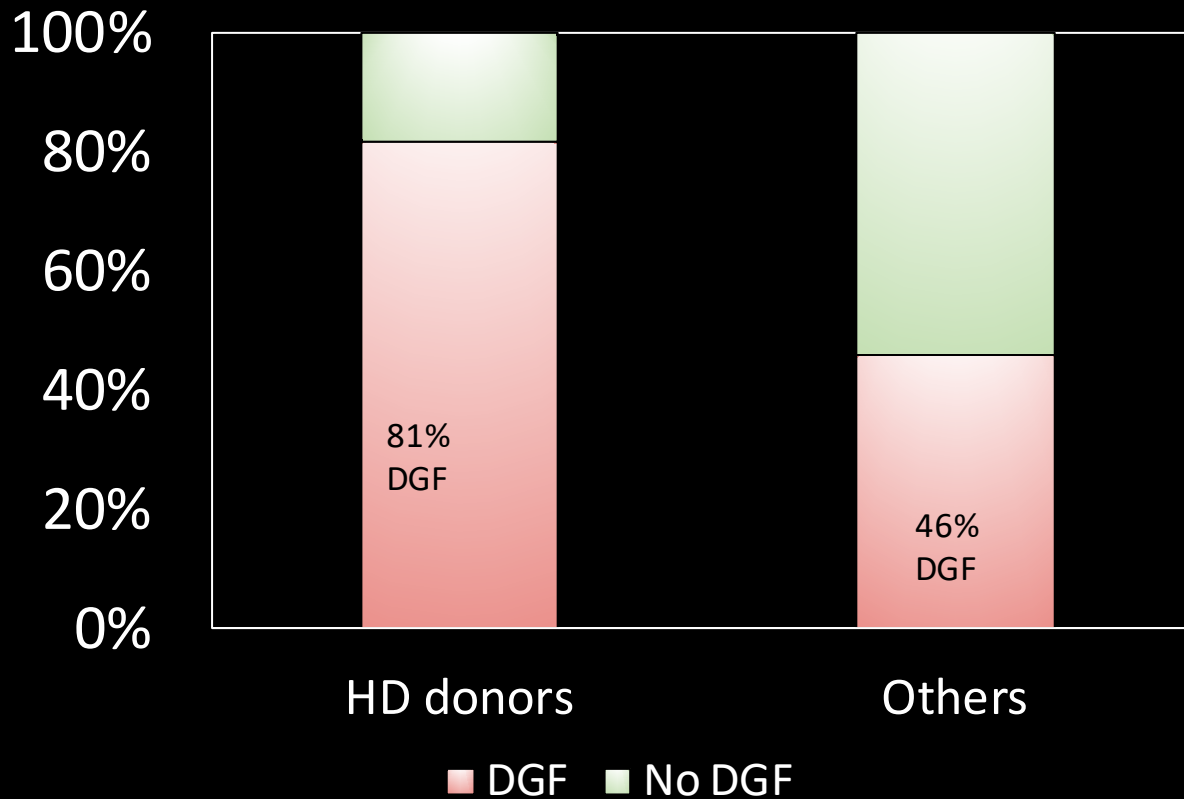
Outcomes of “dialysis kidneys”



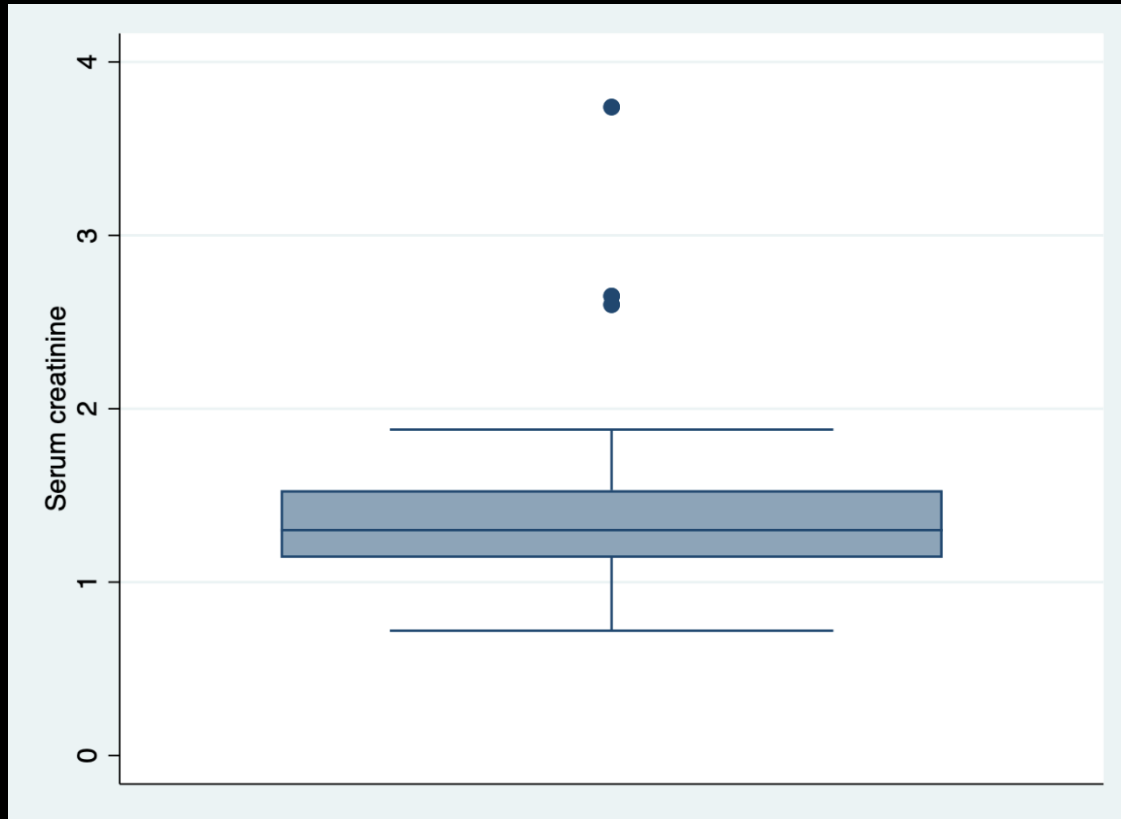
Outcomes of “dialysis kidneys”



Frequency of DGF in recipients of HD vs non-HD donors



Composite current creatinines from 60 HD donors

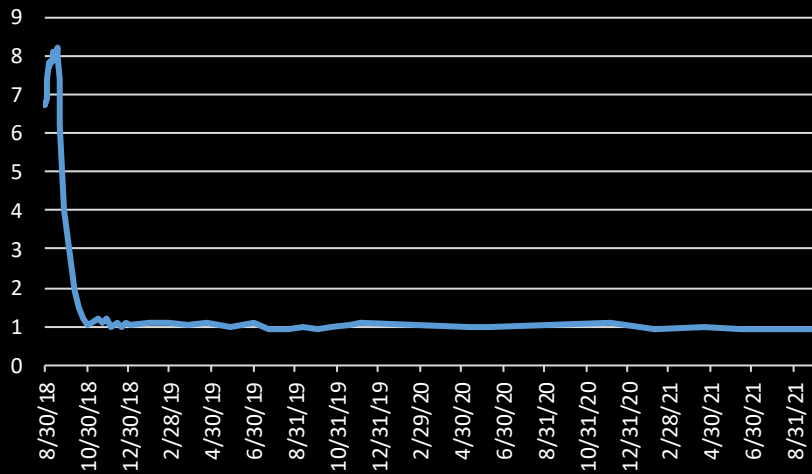


Median follow-up:
564 days

Case examples: No DGF

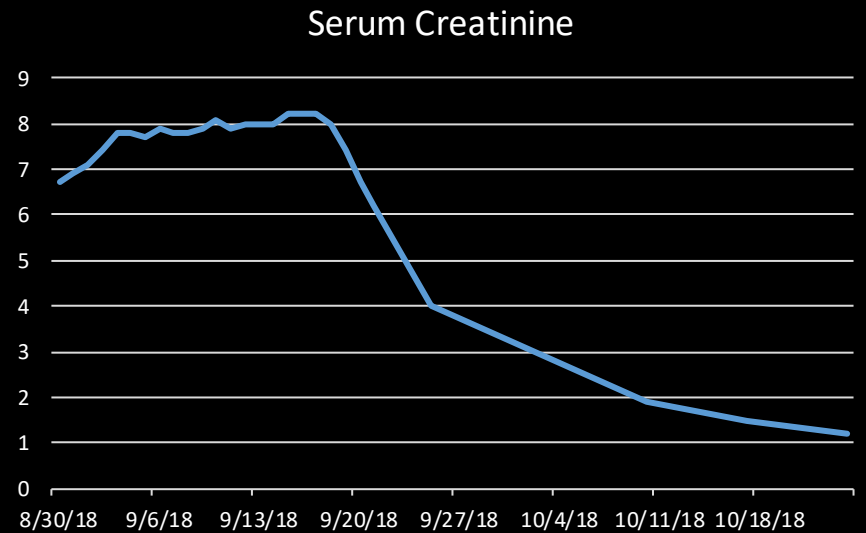
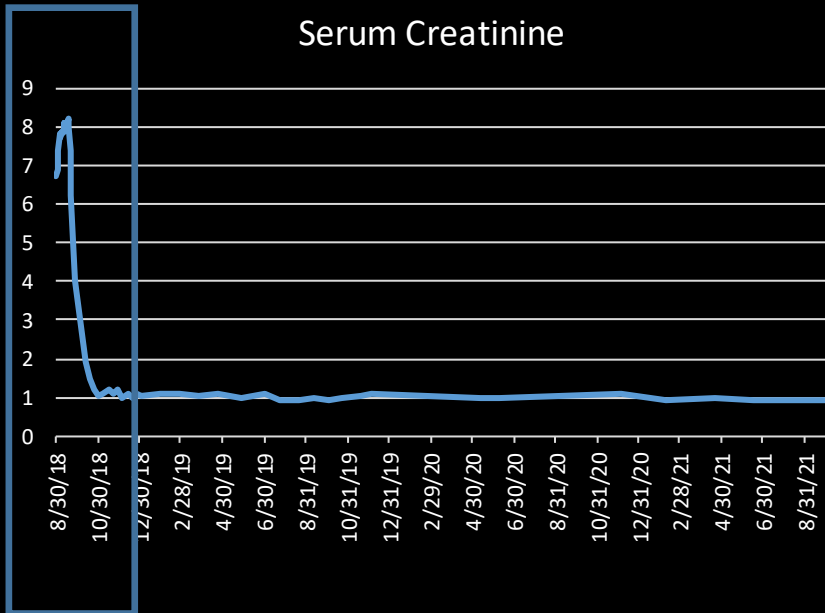
Donor: 35yo DBD, COD drug OD, no prior medical hx, CIT 18hrs

Serum Creatinine



Case examples: No DGF

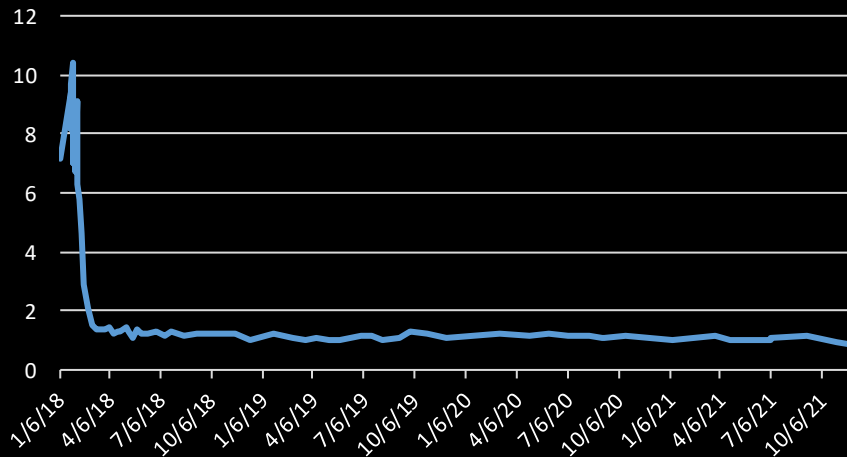
Donor: 35yo DBD, COD drug OD, no prior medical hx, CIT 18hrs



Case examples: DGF

Donor: 28yo DBD, COD drug OD, no prior medical hx, CIT 38hrs

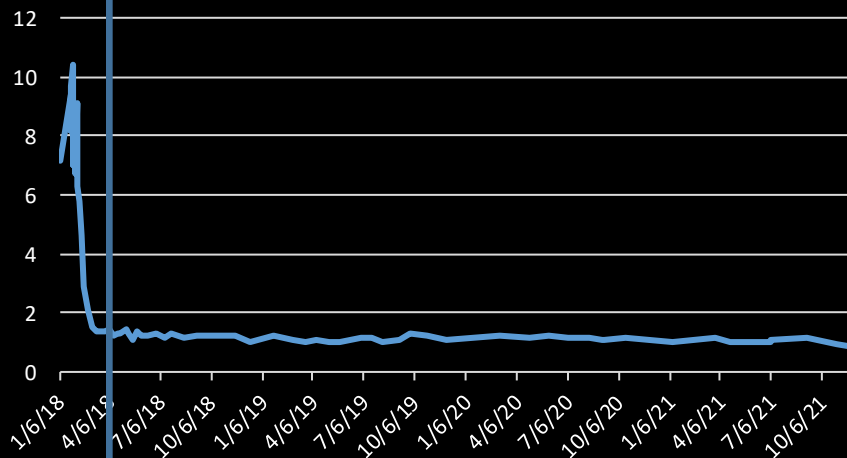
Serum Creatinine



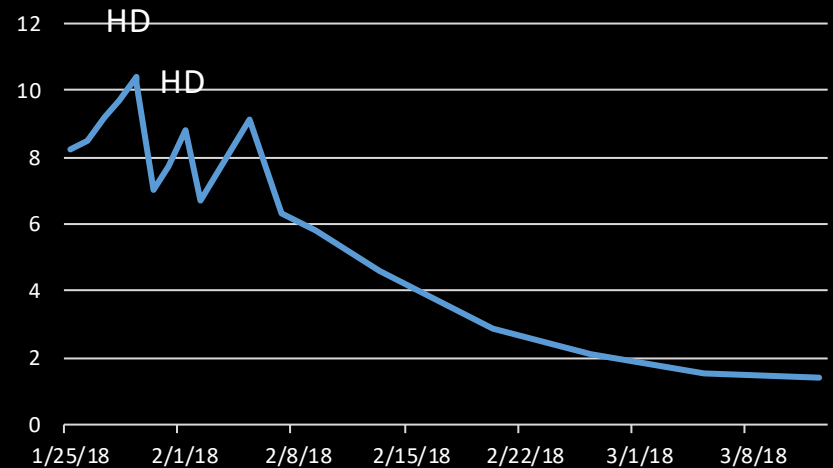
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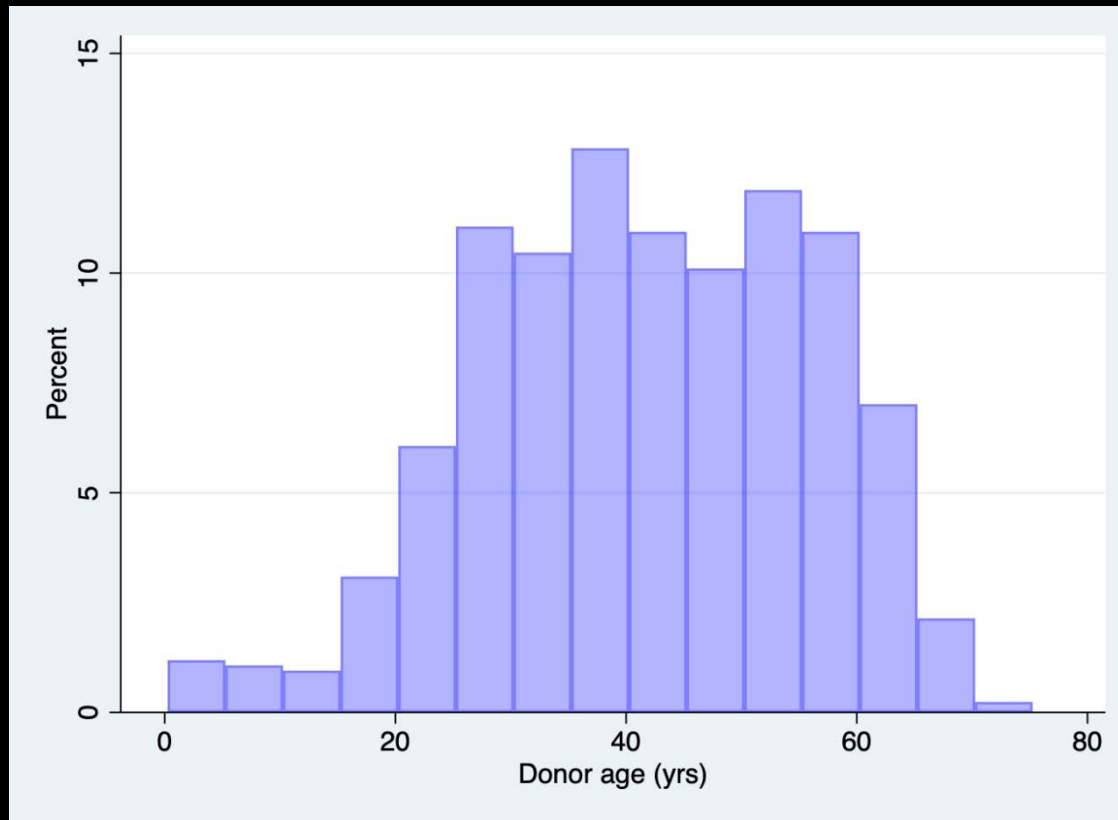


Serum Creatinine

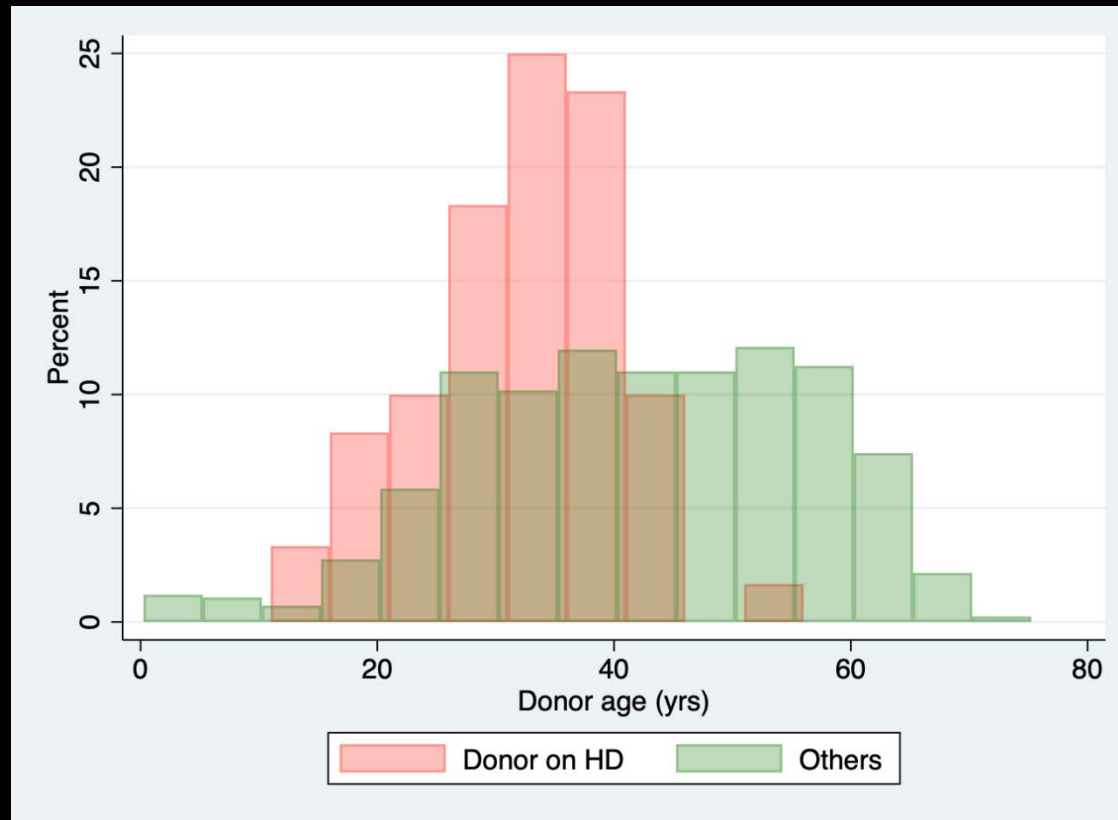


Duration of DGF: 8 days (2 HD treatments)

How is this possible?



How is this possible?



Patient's perspective

“What do you mean the donor was on dialysis??”



Patient's perspective

“What do you mean the donor was on dialysis??”



Get consent and set appropriate expectation

There ***IS*** a limit...



This is
NOT OK!
(ie don't get
crazy)

Rules of thumb ^{*mine}



Consider the recipient



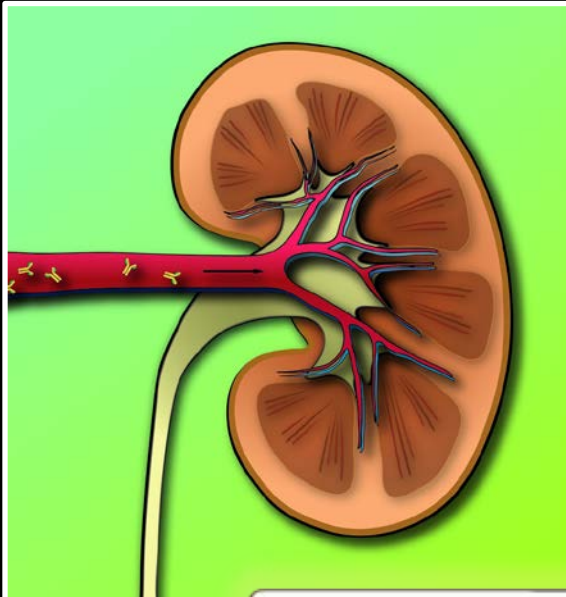
Consider donor comorbidities



See biopsy with your own eyes



Consider “cumulative” injury



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

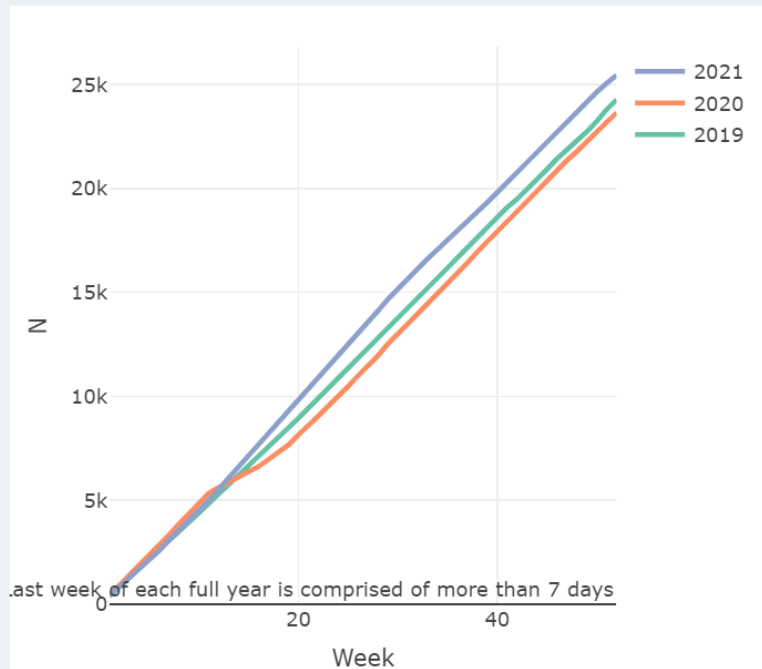
OPTN Kidney Transplant Rate 2019-2021 COVID-19 Impact

**Andrew D. Howard, MD, FACP
Past-President, Forum of ESRD Networks**

OPTN Kidney Transplant Rate 2019-2021

All Donors

National Cumulative Kidney Transplants by Week and Year (All Donors)

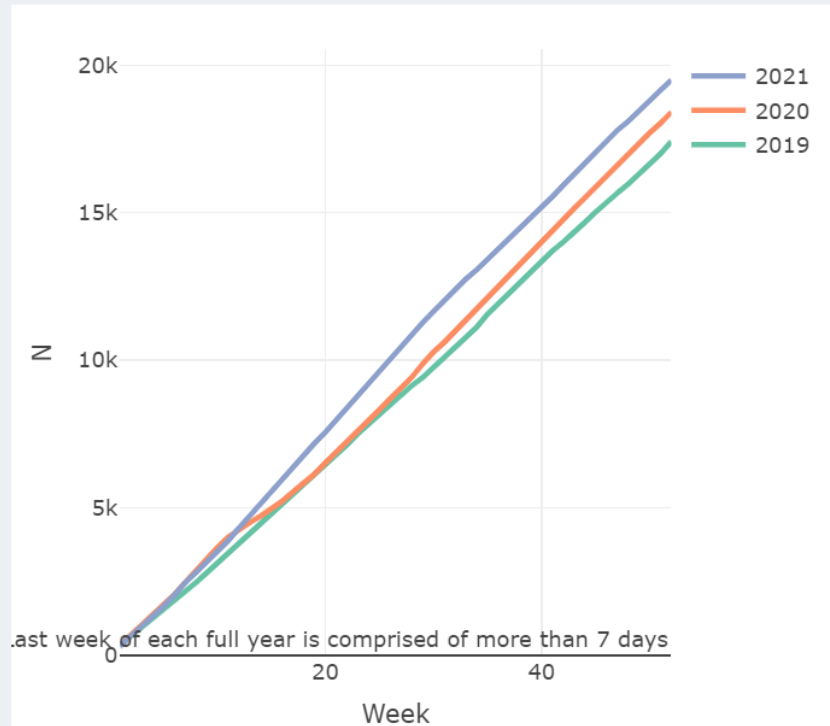


National Kidney Transplants through December 31 (All Donors)

Year	Total	Living	Deceased	Percent Change
2021	25,459	5,962	19,497	7.90%
2020	23,596	5,228	18,368	-2.79%
2019	24,273	6,867	17,406	10.32%
2018	22,002	6,442	15,560	6.61%
2017	20,638	5,811	14,827	4.07%
2016	19,830	5,629	14,201	6.63%

OPTN Kidney Transplant Rate 2019-2021 Deceased Donors

National Cumulative Kidney Transplants by Week and Year (Deceased Donors)

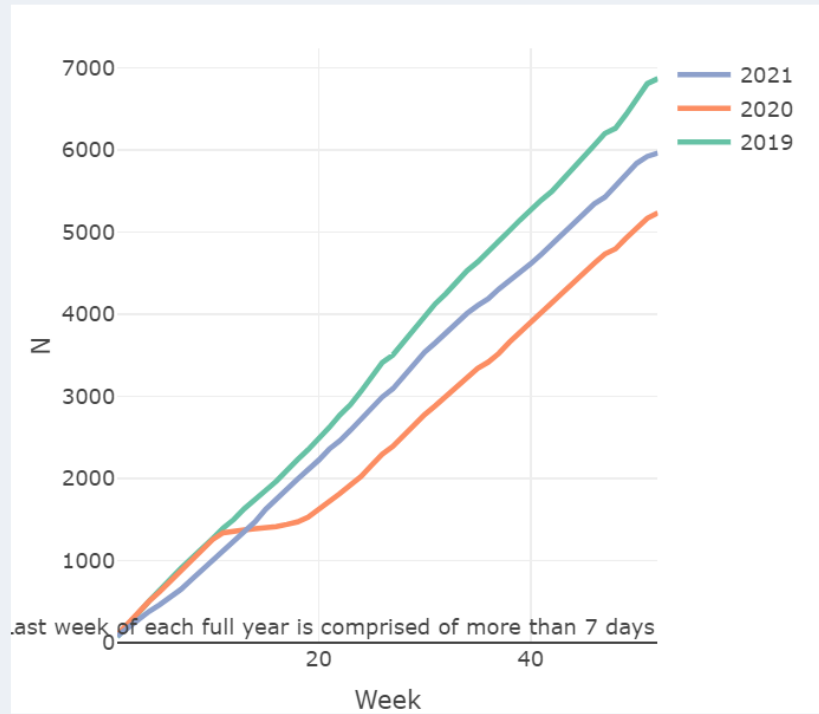


National Kidney Transplants through December 31 (Deceased Donors)

Year	Total	Deceased	Percent Change
2021	19,497	19,497	6.15%
2020	18,368	18,368	5.53%
2019	17,406	17,406	11.86%
2018	15,560	15,560	4.94%
2017	14,827	14,827	4.41%
2016	14,201	14,201	9.50%

OPTN Kidney Transplant Rate 2019-2021 Living Donors

National Cumulative Kidney Transplants by Week and Year (Living Donors)



National Kidney Transplants through December 31 (Living Donors)

Year	Total	Living	Percent Change
2021	5,962	5,962	14.04%
2020	5,228	5,228	-23.87%
2019	6,867	6,867	6.60%
2018	6,442	6,442	10.86%
2017	5,811	5,811	3.23%
2016	5,629	5,629	0.02%

OPTN Kidney Transplant Rate 2019-2021

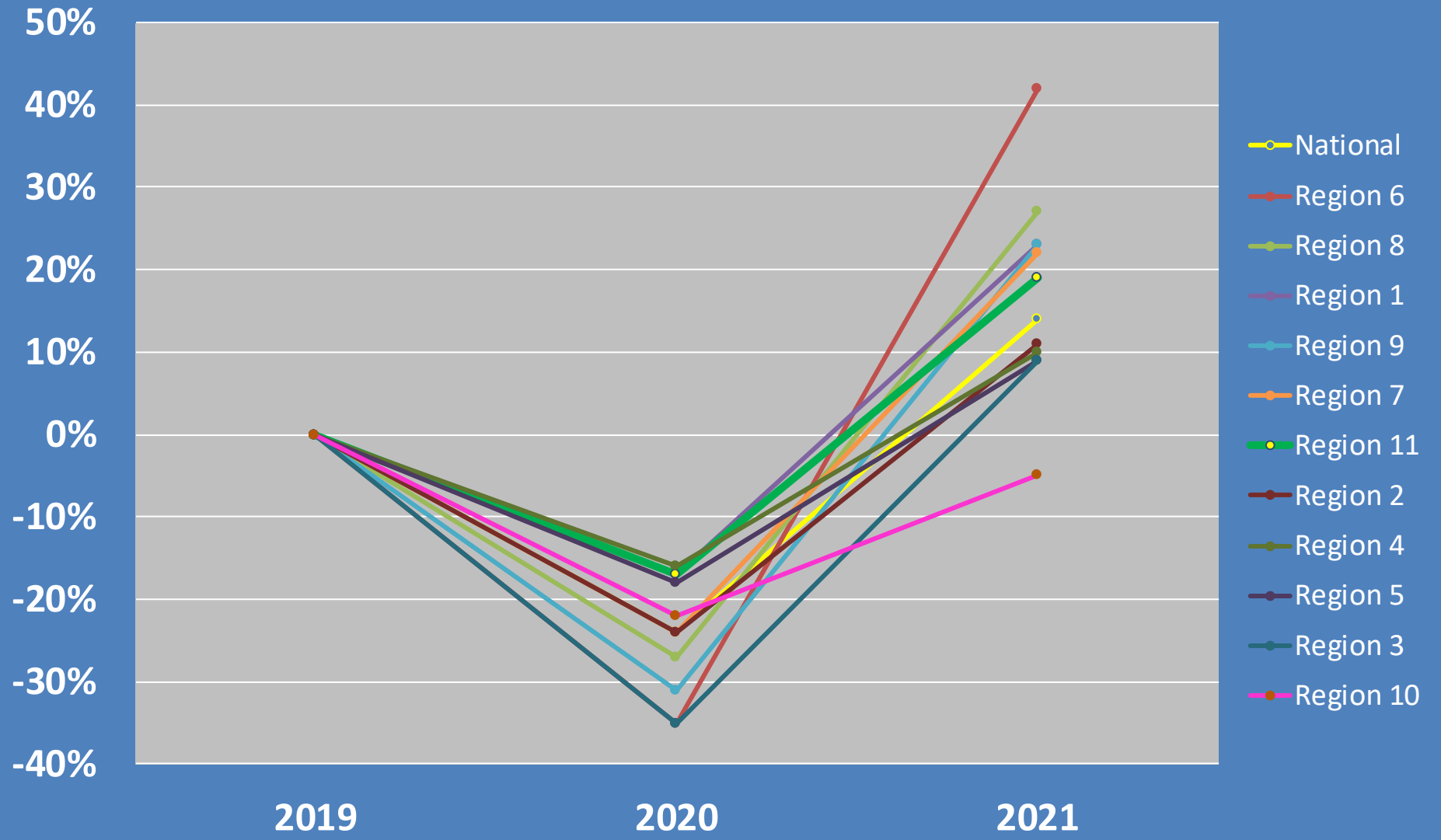
Living Donors – OPTN Region

OPTN Region	States	LD Transplant(2019/2020/2021)	Percent Change (2019v20 / 2020v21)
National		6867 / 5234 / 5970	-24% / +14%
1	CT, ME, MA, NH, RI	313 / 259 / 319	-17% / +23%
2	DC, DE, MD, NJ, PA, WV	904 / 683 / 757	-24% / +11%
3	AL, AR, FL, GA, LA, MS, PR	794 / 519 / 565	-35% / +9%
4	OK, TX	765 / 642 / 704	-16% / +10%
5	AZ, CA, NV, NM, UT	971 / 793 / 864	-18% / +9%
6	AK, HI, ID, MT, OR, WA	195 / 127 / 180	-35% / +42%
7	IL, MN, ND, SD, WI	789 / 603 / 736	-24% / +22%
8	CO, IA, KS, MO, NE, WY	379 / 276 / 350	-27% / +27%
9	NY, VT	645 / 442 / 545	-31% / +23%
10	IN, MI, OH	587 / 455 / 434	-22% / -5%
11	KY, NC, SC, TN, VA	525 / 435 / 516	-17% / +19%

RED – 2021 Improvement > National Average, BLACK – 2021 Improvement < National Average

OPTN Kidney Transplant Rate 2019-2021

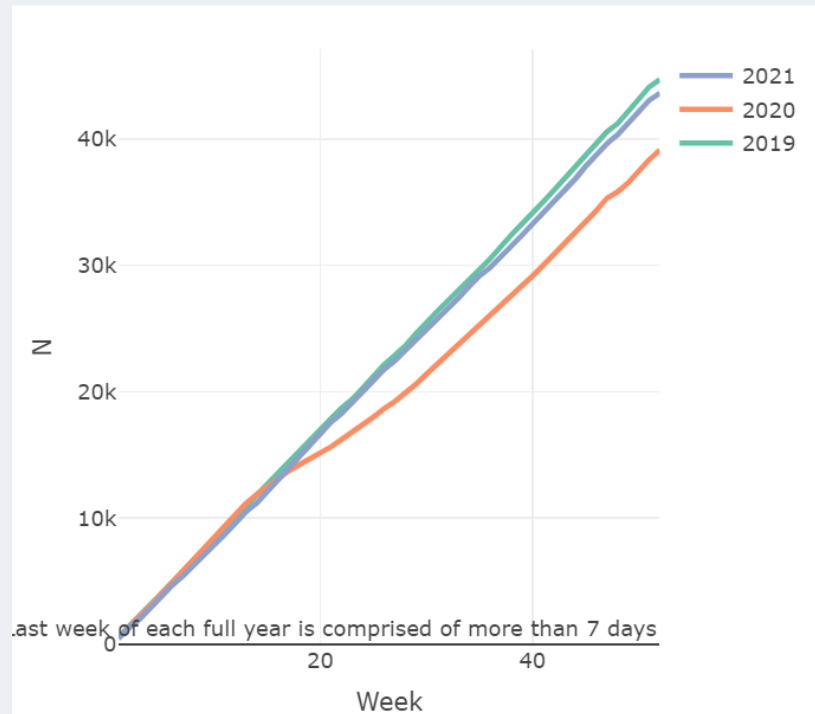
Living Donors – Year to Year Change



OPTN Kidney Transplant Waitlist 2019-2021

Waitlist

National Cumulative Kidney Waitlist Additions by Week and Year



National Kidney Waitlist Additions through December 31

Year	Additions	Percent Change
2021	43,616	11.75%
2020	39,030	-12.69%
2019	44,703	6.79%
2018	41,860	8.82%
2017	38,466	0.72%
2016	38,190	0.86%

How CMS is Incentivizing Nephrologists & Dialysis Facilities to Improve Kidney Transplant and Waitlisting

- **Dialysis Quality Incentive Program (QIP)**
 - **For Dialysis Facilities**
 - **Percent of Prevalent Patients Waitlisted Measure (PPPW)**
 - **Initial Performance year – 2020**
 - **First Payment Year – 2022***
 - **Measure weight – 4% of up to a potential 2% withhold of each PPS payment**
 - **50th percentile of performance – 16.73%**

***No performance scores or payment penalties for 2022**

How CMS is Incentivizing Nephrologists & Dialysis Facilities to Improve Kidney Transplant and Waitlisting

- **ESRD Treatment Choices Model (ETC Model)**
 - **For Nephrology Providers and Dialysis Facilities**
 - **Mandatory payment model**
 - **Timeline: 1/1/2021-6/30/2027**
 - **Initial payment adjustments begin 7/1/2022**
 - **Aligned dialysis beneficiaries ONLY**
 - **Transplant rate weighted 50% of the home dialysis rate**
 - **Waitlist rate and LD transplant rate (include preemptive LD transplants)**
 - **+/- adjustment to the Dialysis Facility PPS or the Nephrology Provider MCP**

How CMS is Incentivizing Nephrologists & Dialysis Facilities to Improve Kidney Transplant and Waitlisting

- **Kidney Care Choices Models**
 - **For Nephrology Providers, Transplant Providers and Dialysis Providers**
 - **Voluntary payment models**
 - **Kidney Care First (Nephrology Providers only)**
 - **Kidney Care Entities (Nephrology Providers, Transplant Providers and Dialysis Providers)**
 - **Timeline: 1/1/2022-12/31/2026**
 - **Aligned CKD 4/5 AND dialysis beneficiaries**
 - **Transplant Bonus**
 - **\$15,000 paid in increasing amounts/year over 3 years provided that the transplant remains functional**

Q&As – 5 Minutes



Questions to Run On -- Revisited

How Might We ...

- Educate differently to increase the use of high KDPI kidneys?
- Utilize telemedicine to improve patient access to kidney transplantation?
- Identify and develop unique strategies to continue increasing kidney transplantation during COVID?

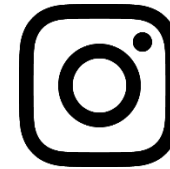
Recap & Next Steps

- 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

Julie Moss

jmoss@hsag.com

813-865-3125

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