

# Use of Small (<10 kg) kidney donors in the US

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# Disclosures

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# Introduction

- The supply of kidneys for transplant continues to exceed the demand.
- Efforts to expand the donor pool have led to interest in small pediatric kidney donors.
- We reviewed kidney recovery, use, and outcomes for kidneys from donors weighing <10 kg.

## Methods

- SRTR standard analysis files
- Examined all donors weighing <10 kg
  - January 1, 2010-June 30, 2015
- Donor defined as having at least 1 organ procured for the purpose of transplant
- Kidneys reported to UNOS by the OPO as:
  - single left/right or en bloc

## Results: Number of transplants

- Total of 848 donors weighing < 10 kg
  - 1696 kidneys
- 1.9% of 45,557 deceased donors
- Number of transplants ranged from 89 (2010) to 119 (2012) per year
- Number of centers, 29 to 40

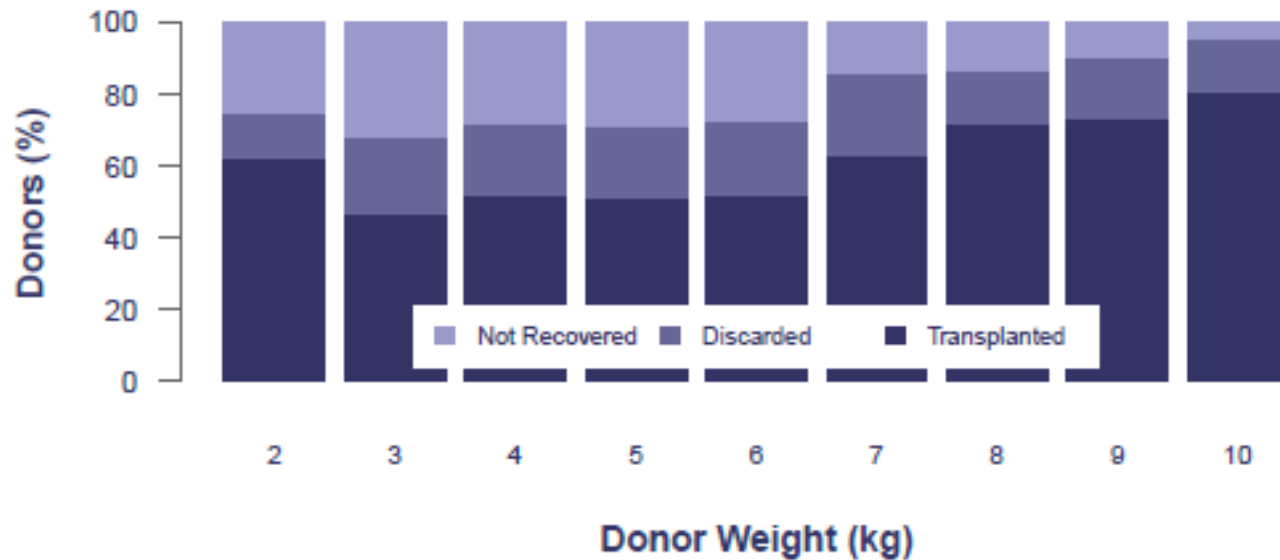
Year	Freq	Centers
2010	89	39
2011	92	40
2012	119	36
2013	117	29
2014	98	33
2015	52	29



Each Bar Represents 1 Transplant Program

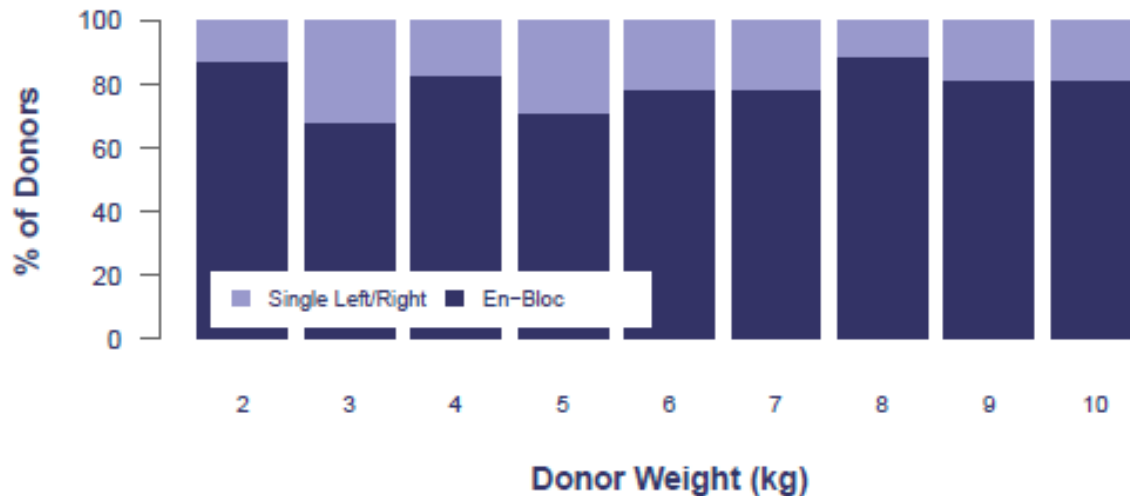
## Disposition of kidneys varied by donor weight

- As donor weight increased, more kidneys were offered for transplant and fewer were not recovered or discarded.



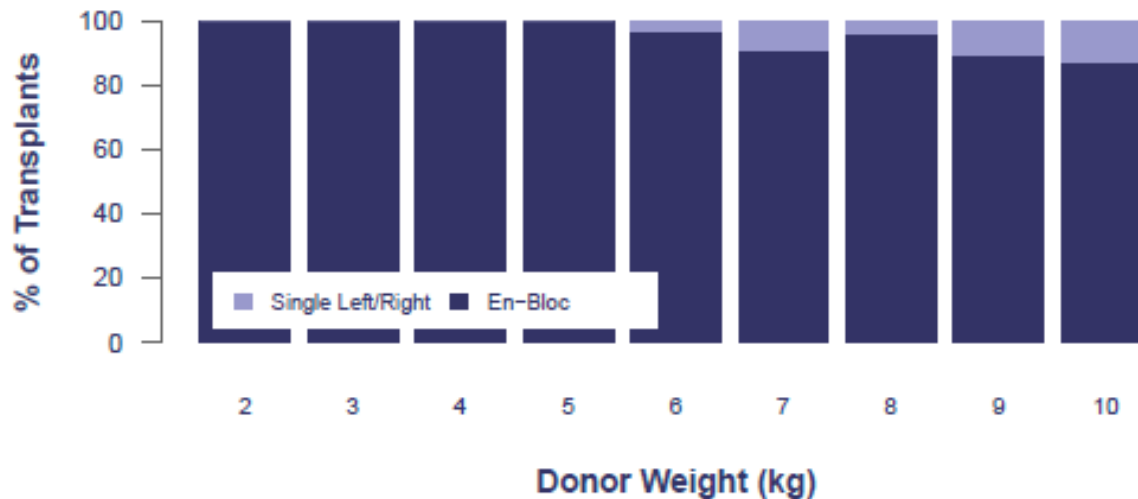
# How were these kidneys offered? en-bloc vs. single

- 683 (81%) were offered en bloc
- 165 (19%) were offered as single left/right kidneys



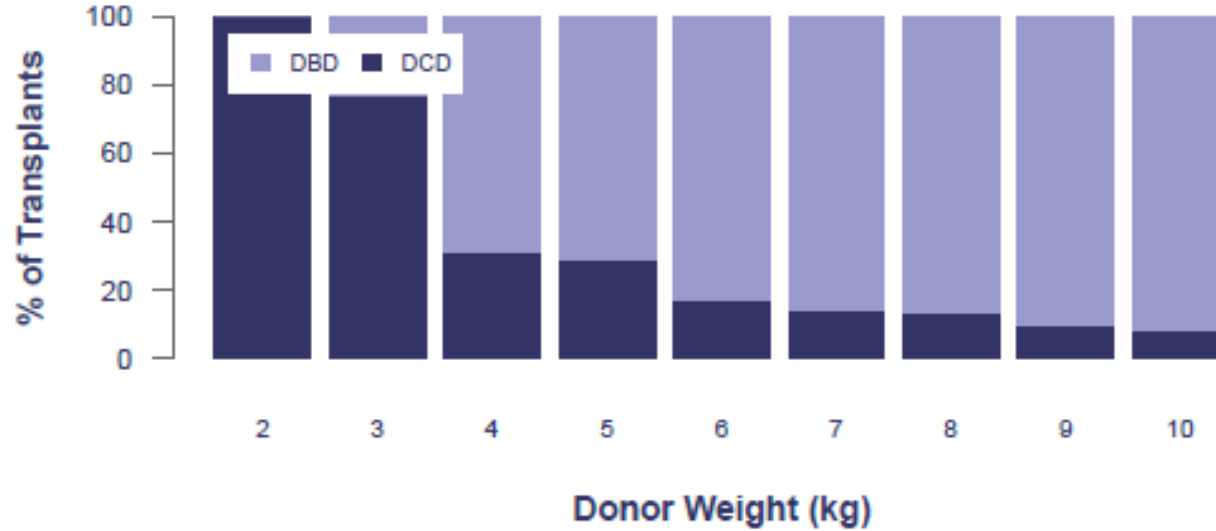
# How were kidneys transplanted? en bloc vs. single

- No kidneys from donors weighing <5 kg were transplanted as single kidneys despite up to 35% being offered as single kidneys.

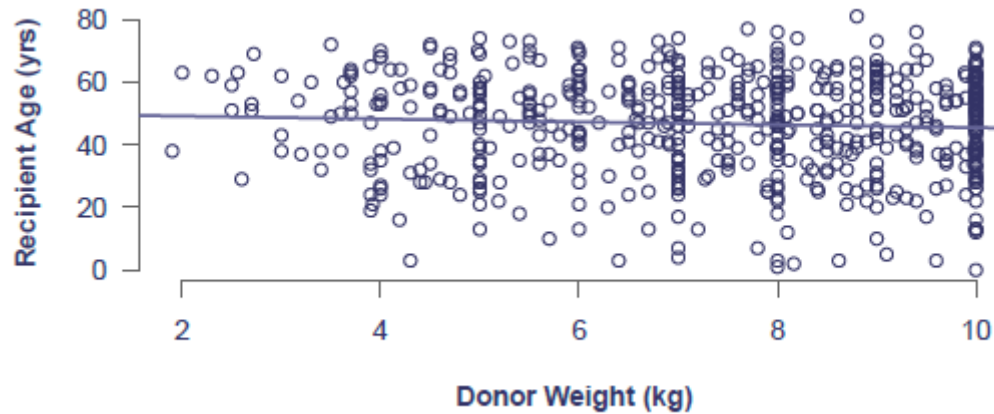




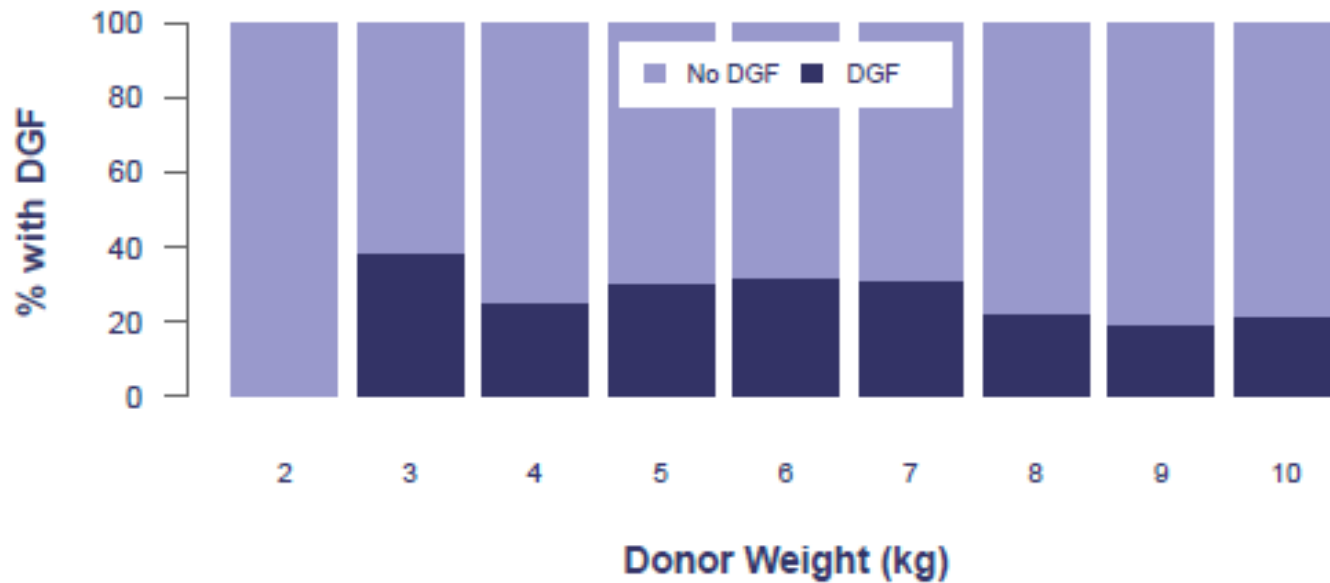
# Results: DBD vs DCD



# Results: Recipient characteristics

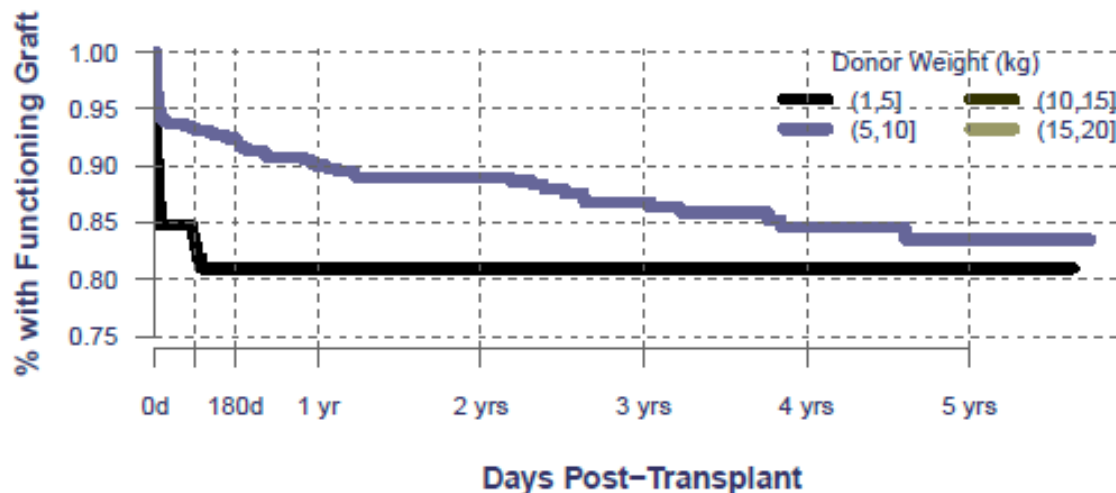


# Results: Delayed graft function

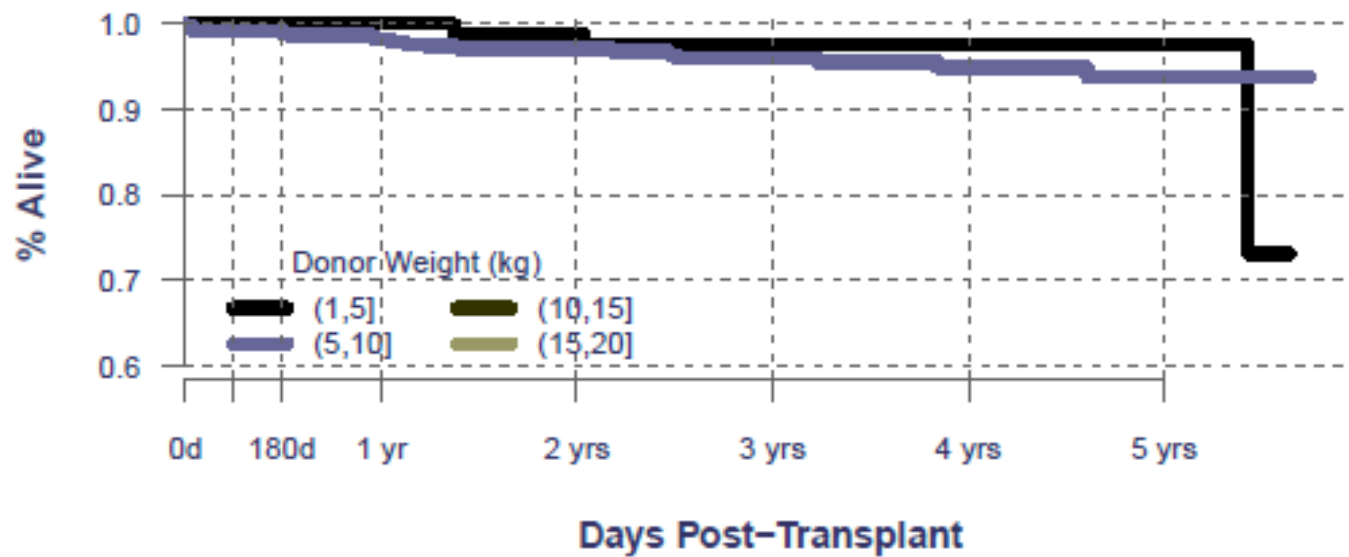


## Results: Graft survival

- Graft survival trended lower for donors weighing 2-5 kg ( $P=0.0687$ ).
- Most graft losses occurred in the first 6 months.



# Results: Patient survival



## Conclusion

- Among small pediatric kidney donors, organ recovery, use, and graft survival varies by donor weight.
- Potential expansion of the organ pool should focus on increasing recovery, utilization, and graft survival, particularly with donors weighing <5 kg.
- Further study is needed to establish the potential yield of organs from this population to optimize their distribution.