



Intestinal Rehabilitation and Transplant Association  
*A section of the Transplantation Society*

# International Intestinal Transplant Registry

**2019 Report**

# ITR Database Description

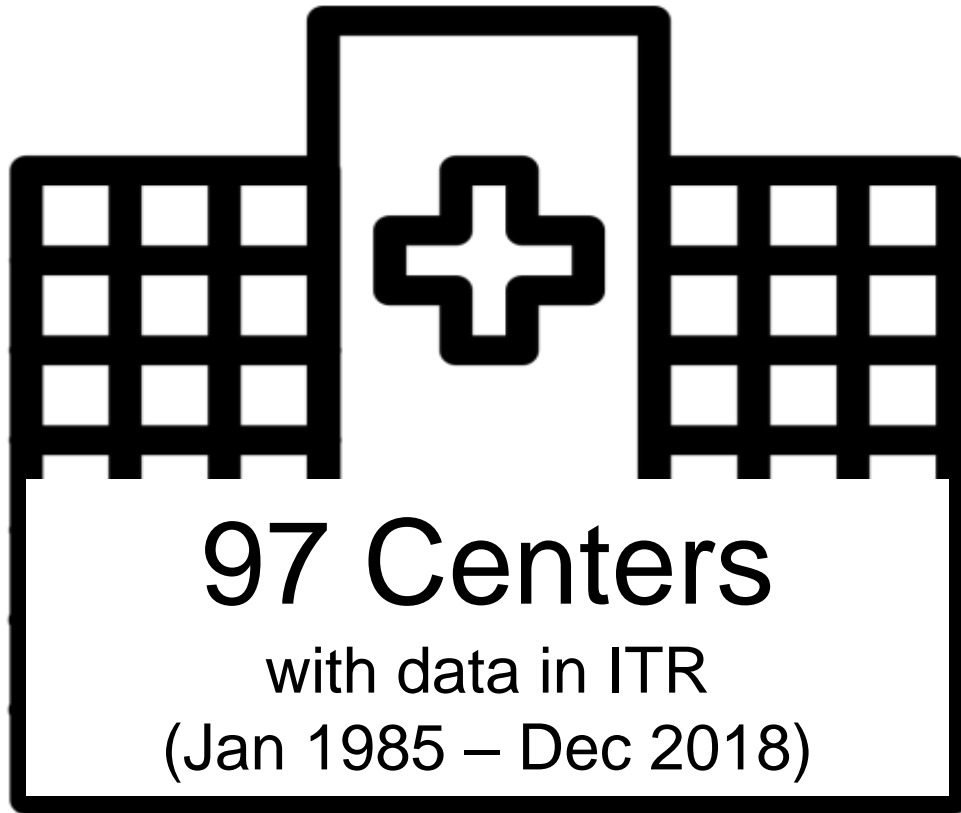
- The Intestinal Transplant Registry (ITR) collects data on the international activity & results of intestine transplantation.
- Data collection and the analyses are performed under the direction of the Scientific Committee of the Intestine Transplant Association. Data collection started in April 1985. *Analyses and slide sets are only provided to contributing centers.*
- A simple, limited core data set is collected to promote reporting. Additional data is collected for specific projects. Participation is voluntary. Data are entered via web forms. Center data is confidential; only aggregate outcomes are reported.

# Definitions and Analyses

- Definitions:

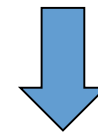
Transplant Type	Intestine	Liver	Stomach
Small Bowel (SBT)	✓		
Liver/SBT	✓	✓	
Modified MVT	✓		✓
Full MVT	✓	✓	✓

- Pediatric cases defined as < 18 years.
- Graft survival = graft removal or recipient death
- R is used for statistics



**Since TRI took over  
ITR in Spring 2017:**

**45** centers  
contributed  
updated data



**645** transplants

# Global Clinical Experience: Intestinal Tx

(All recipients transplanted between Jan 1985-Dec 2018)

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<u>Number of Transplants:</u>	<u>4103</u>
SB Alone	1842
SB+Liver	1251
MVT	810
Modified MVT	200

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Current Survivors	2060/4130 (50%)
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# Global Pediatric Clinical Experience

(All recipients < age 18 years transplanted between Jan 1985 – Dec 2018)

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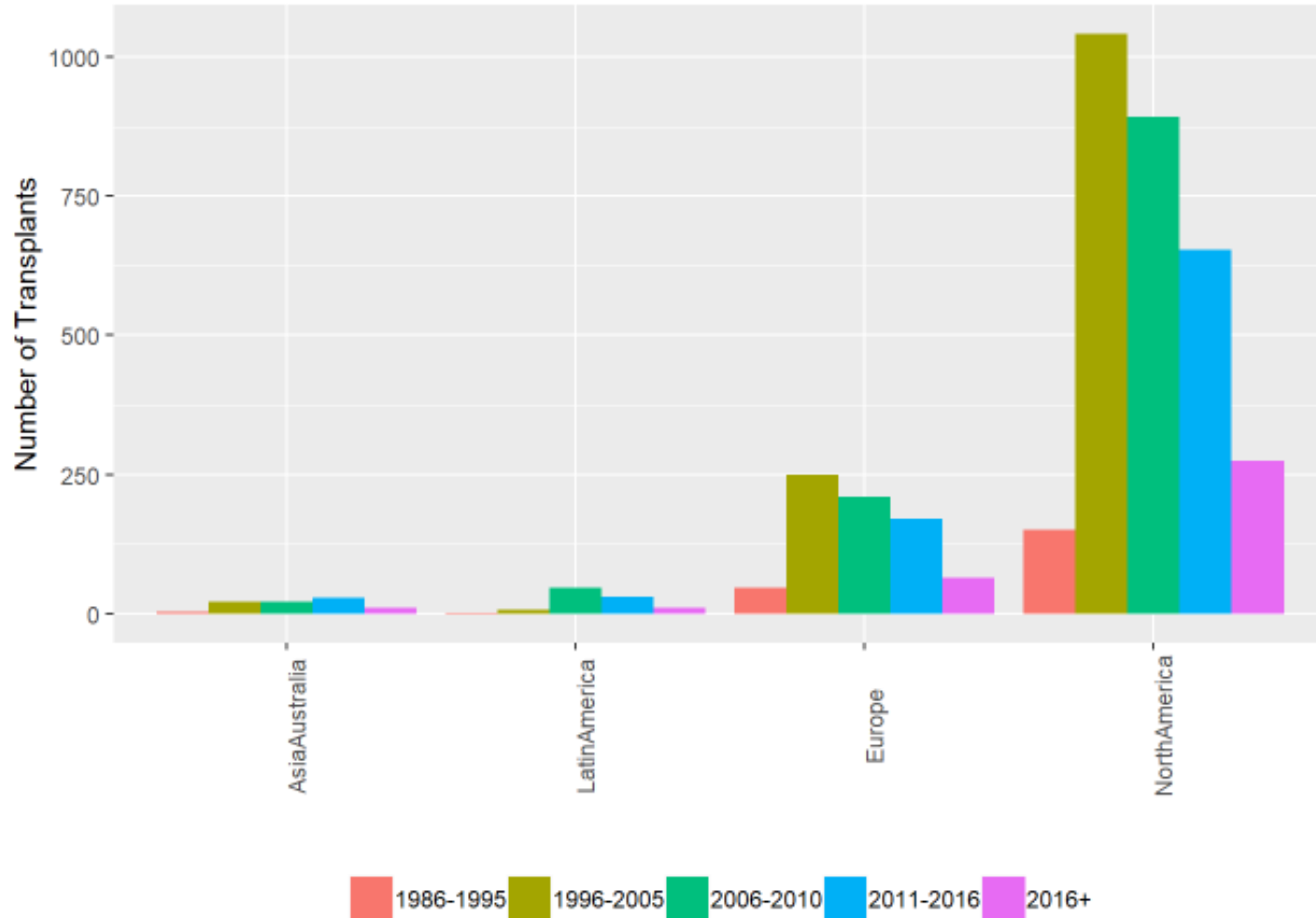
<u>Number of Transplants:</u>	<u>2096</u>
SB Alone	728
SB+Liver	973
MVT	348
Modified MVT	47

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Current Survivors 972/2096  
(46%)

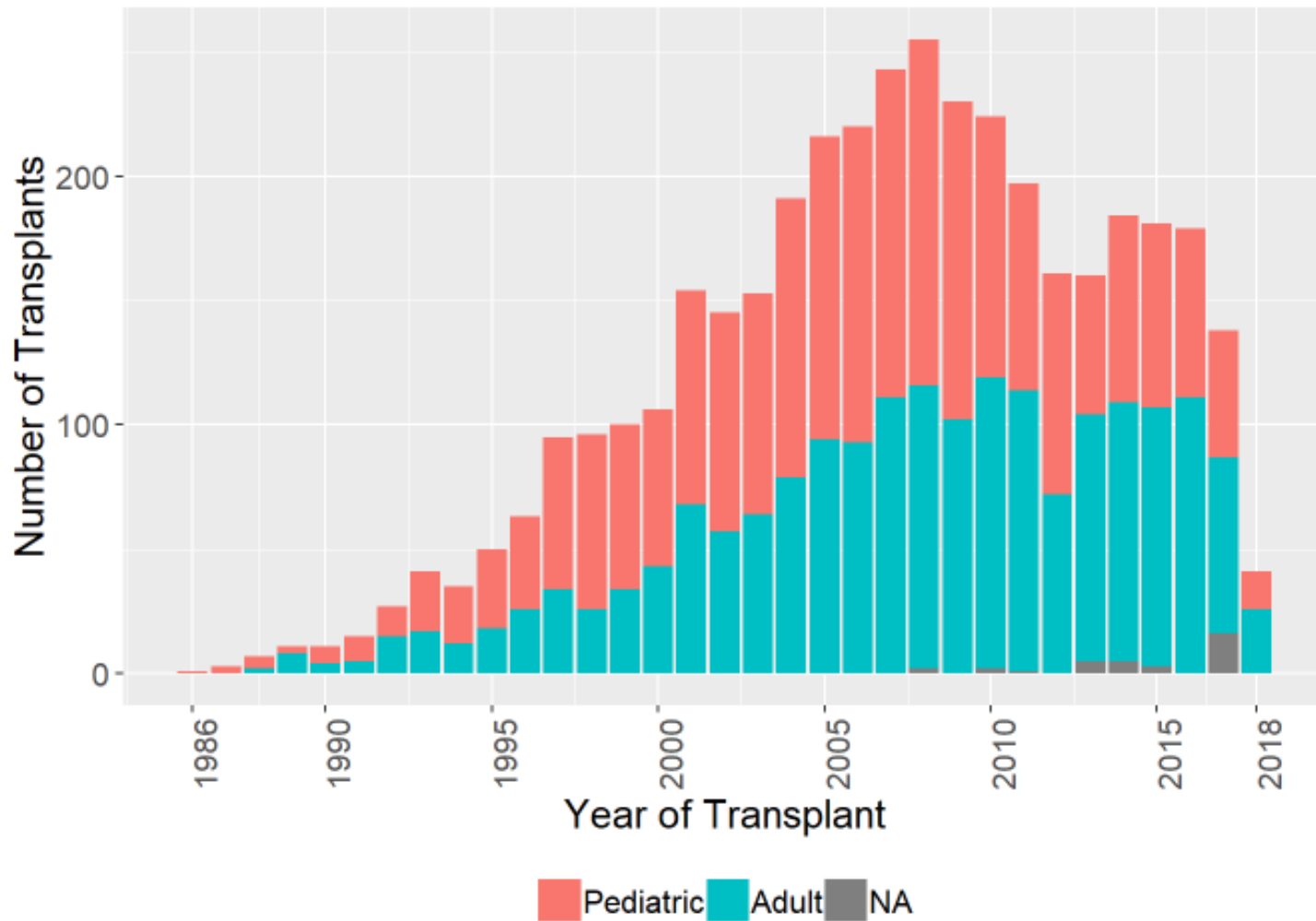
# Regional Intestine Transplant Case Volumes

(All recipients transplanted between Jan 1985-Dec 2018)



# Intestinal Transplants Performed

(All recipients transplanted between Jan 1985-Dec 2018)





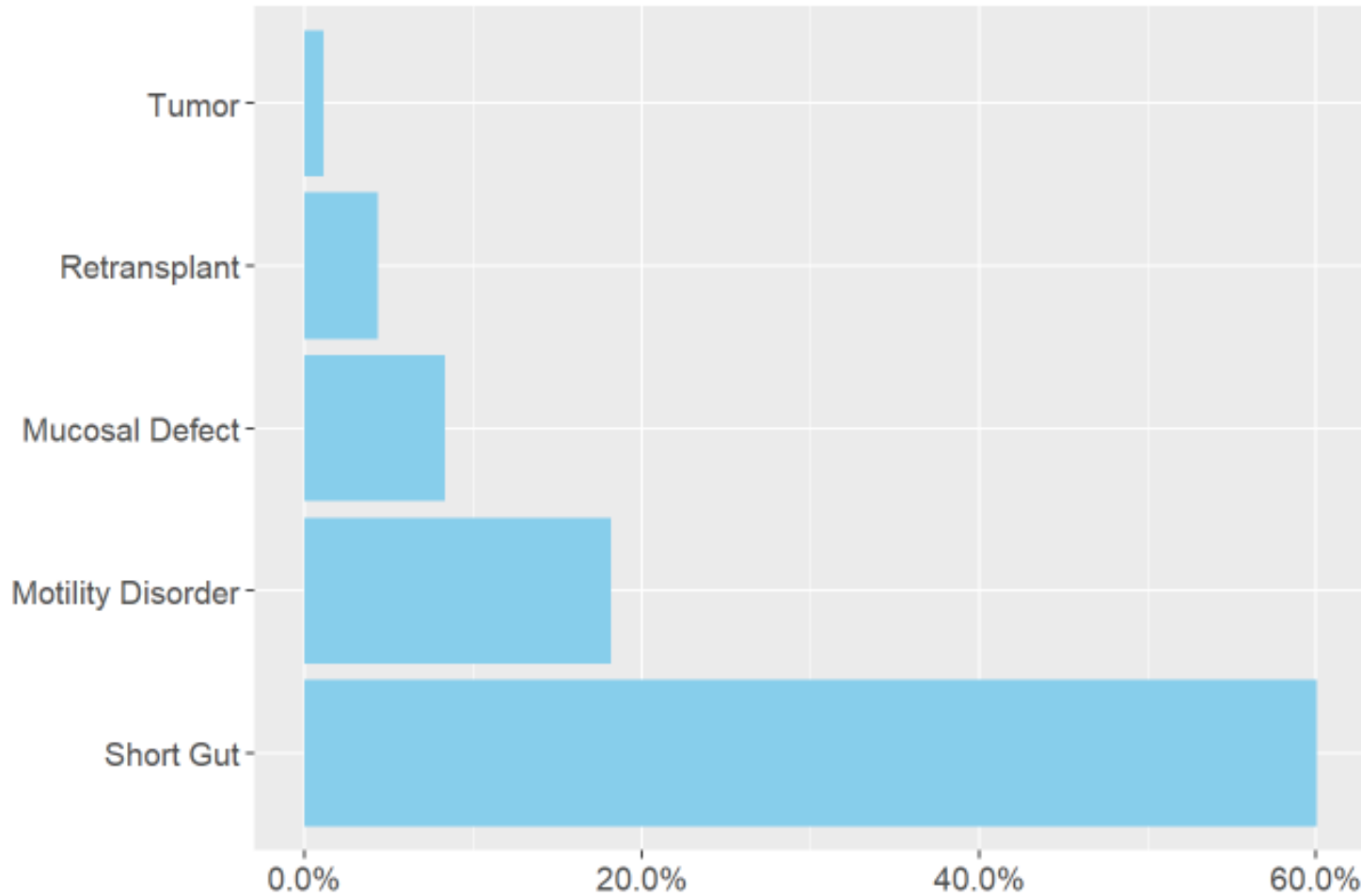
# Intestinal Transplants Performed in the US Compared to UNOS

(All recipients transplanted between Jan 1985-Dec 2018)



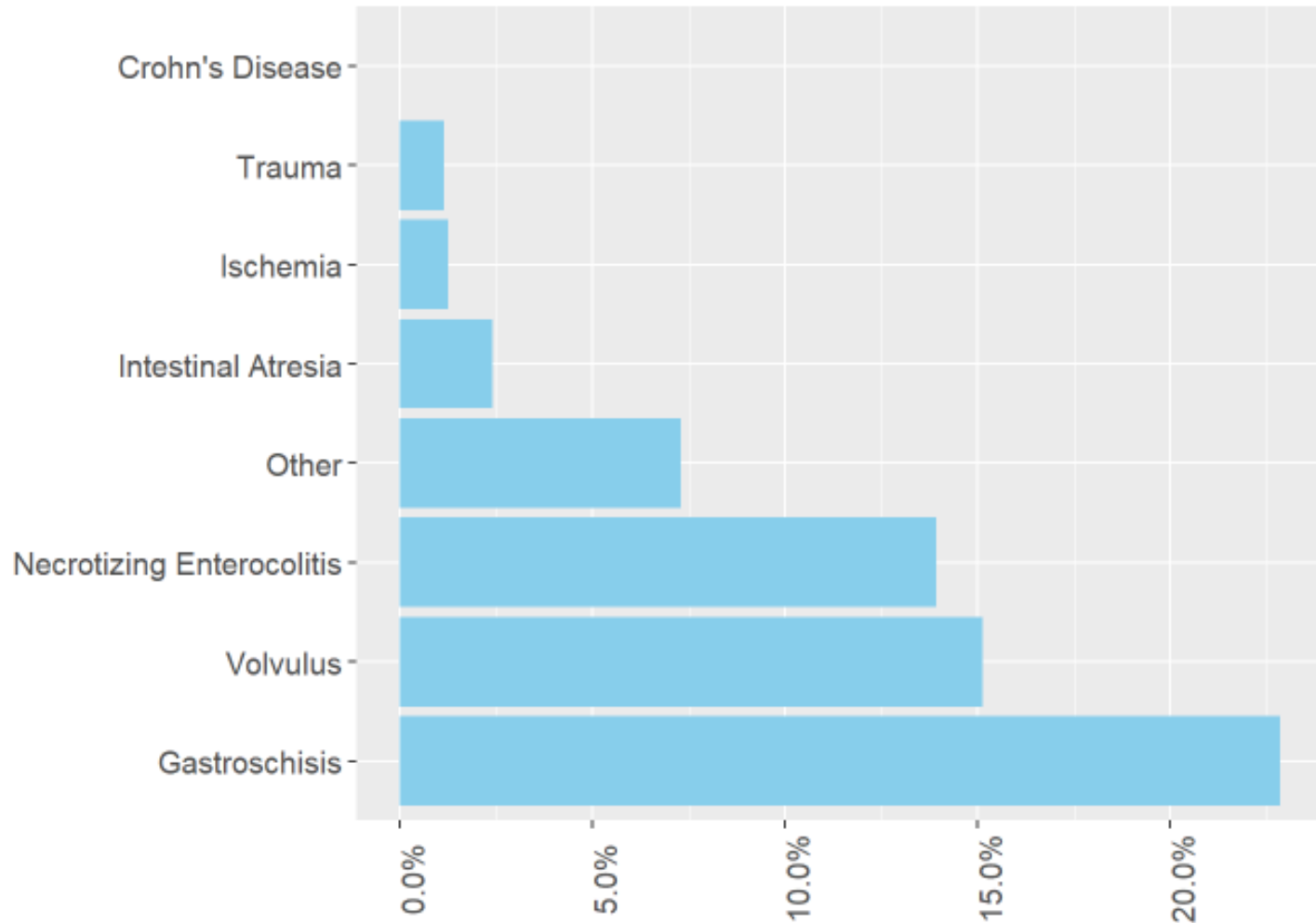
# Indications for Transplant

All **pediatric** recipients transplanted between Jan 1985-Dec 2018, n=2096



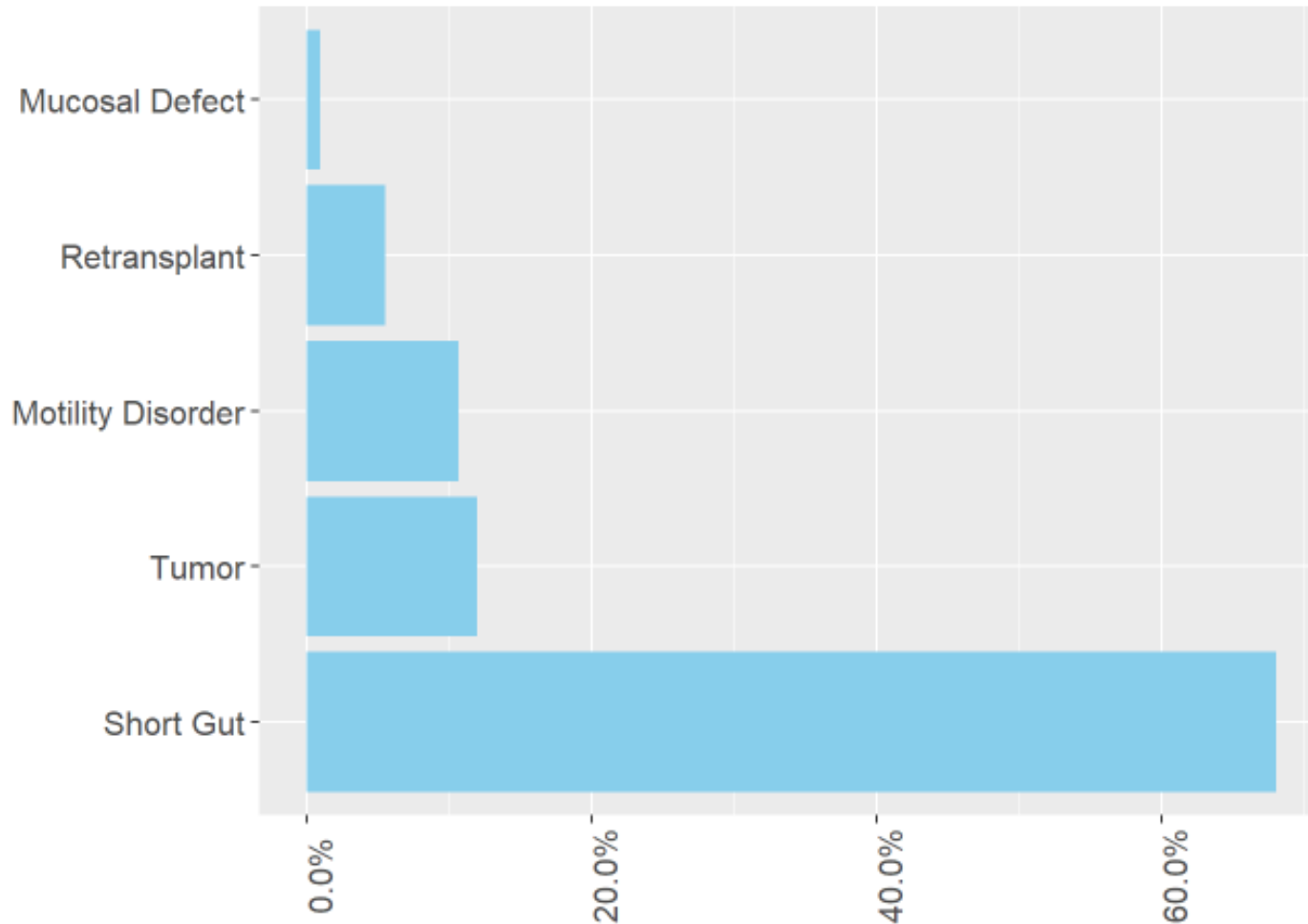
# Types of Short Gut Diagnoses

All **pediatric** recipients transplanted between Jan 1985-Dec 2018, n=2096



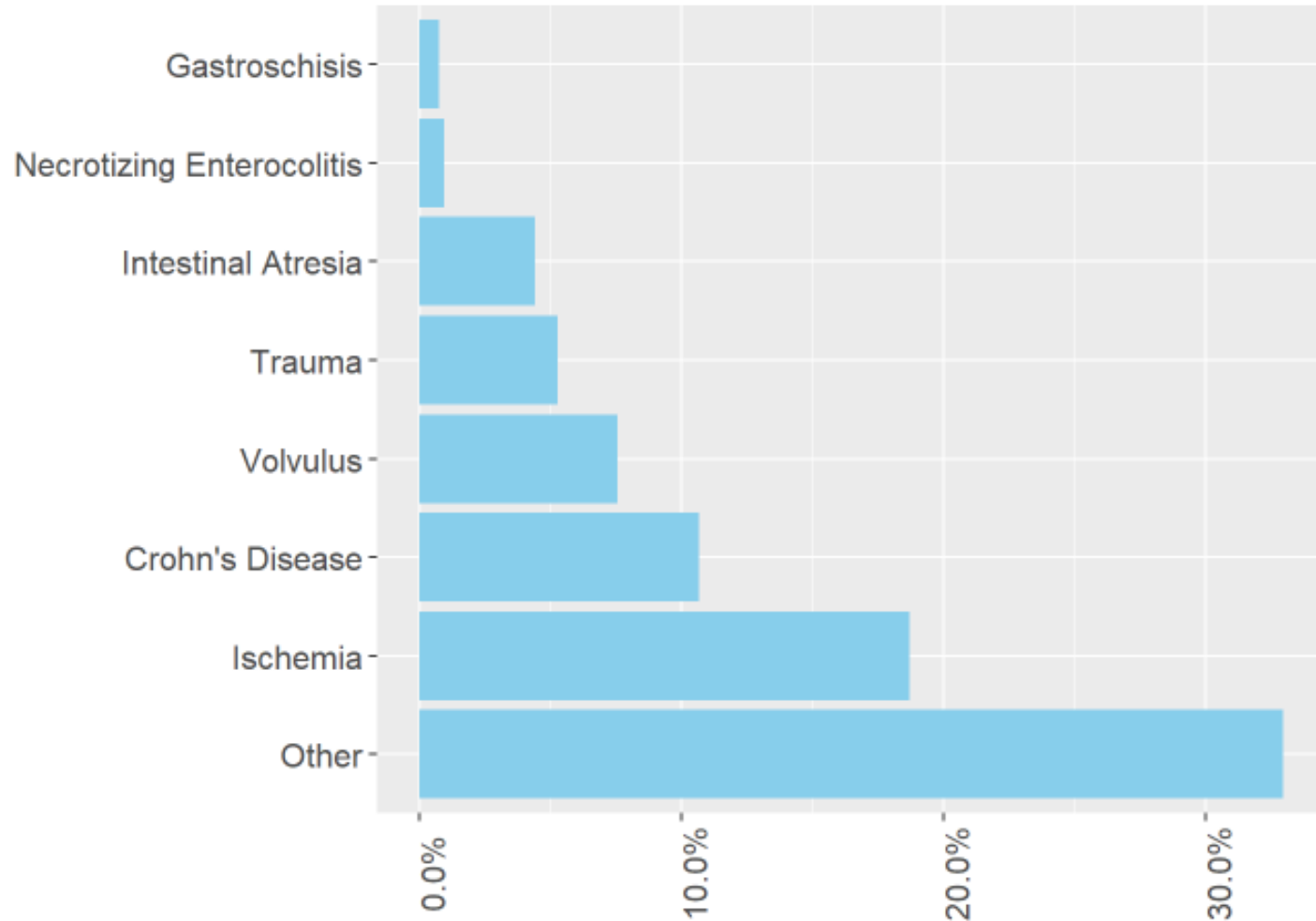
# Indications for Transplant

All **Adult** recipients transplanted between Jan 1985-Dec 2018, n=1951



# Types of Short Gut Diagnoses

All **Adult** recipients transplanted between Jan 1985-Dec 2018, n=1951

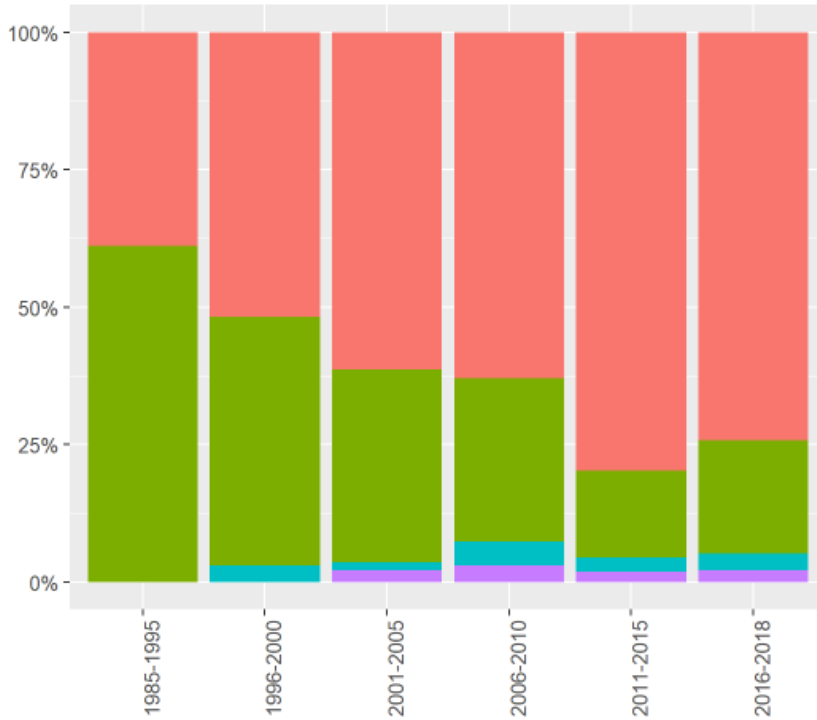


# Global Trends In Clinical Activity

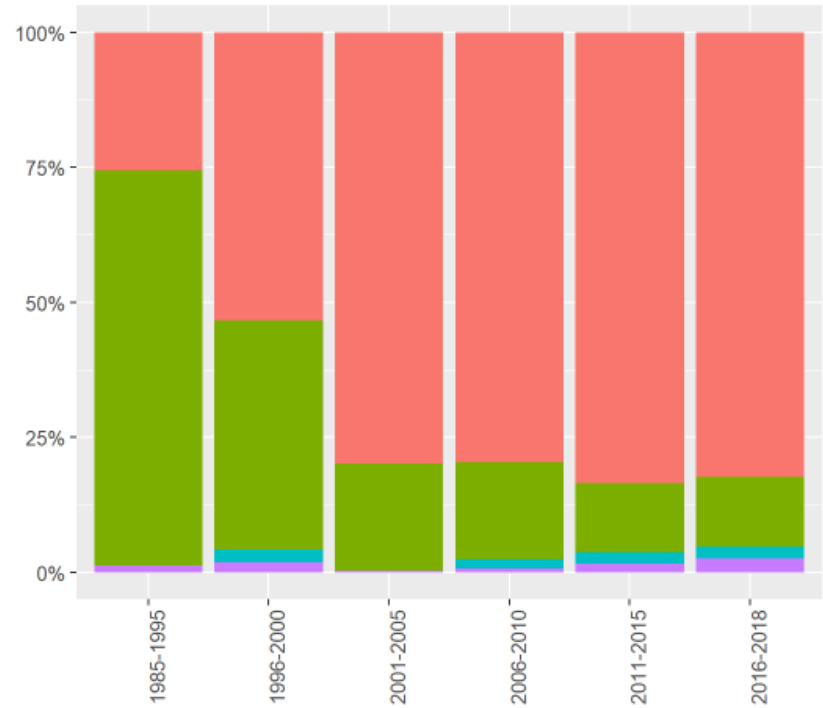
# Pre-Tx Status Over Time

All recipients transplanted between Jan 1985-Dec 2018

## Pediatric, n=2096



## Adults, n=1951

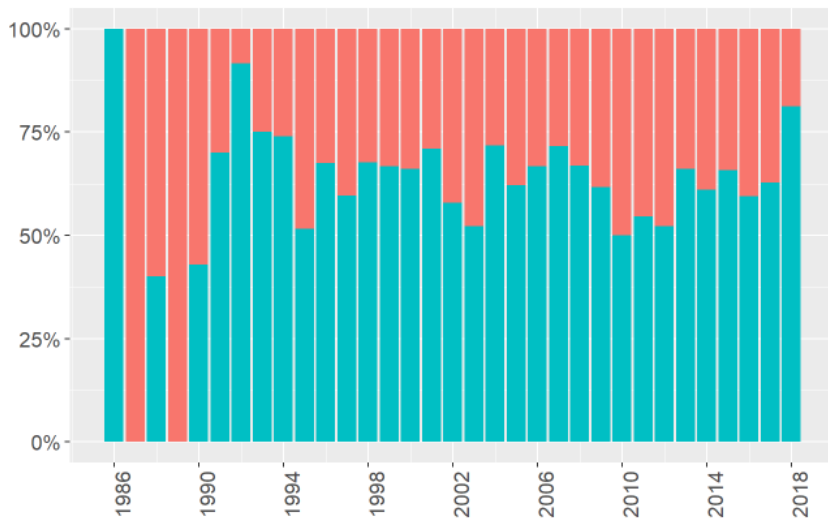


Home ICU  
Hospitalized Unknown

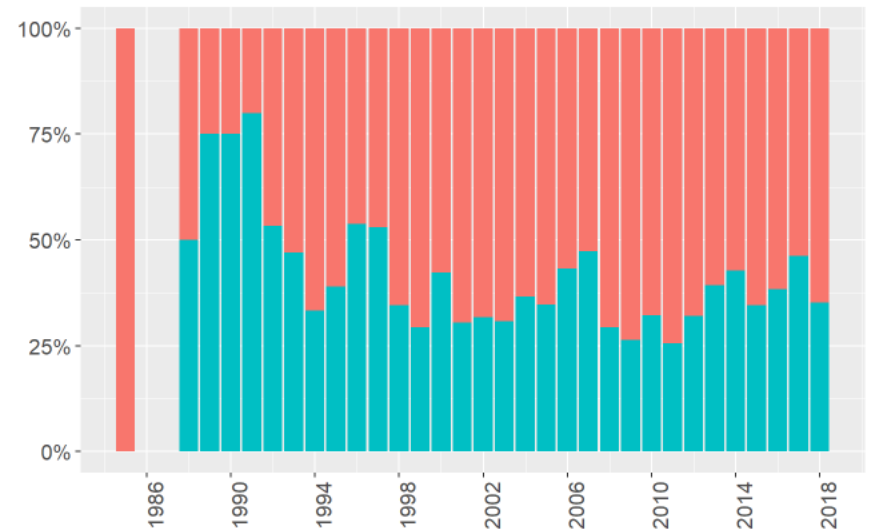
# Transplant Type Over Time

All recipients transplanted between Jan 1985- Dec 2018

## Pediatric, n=2096



## Adults, n=1951

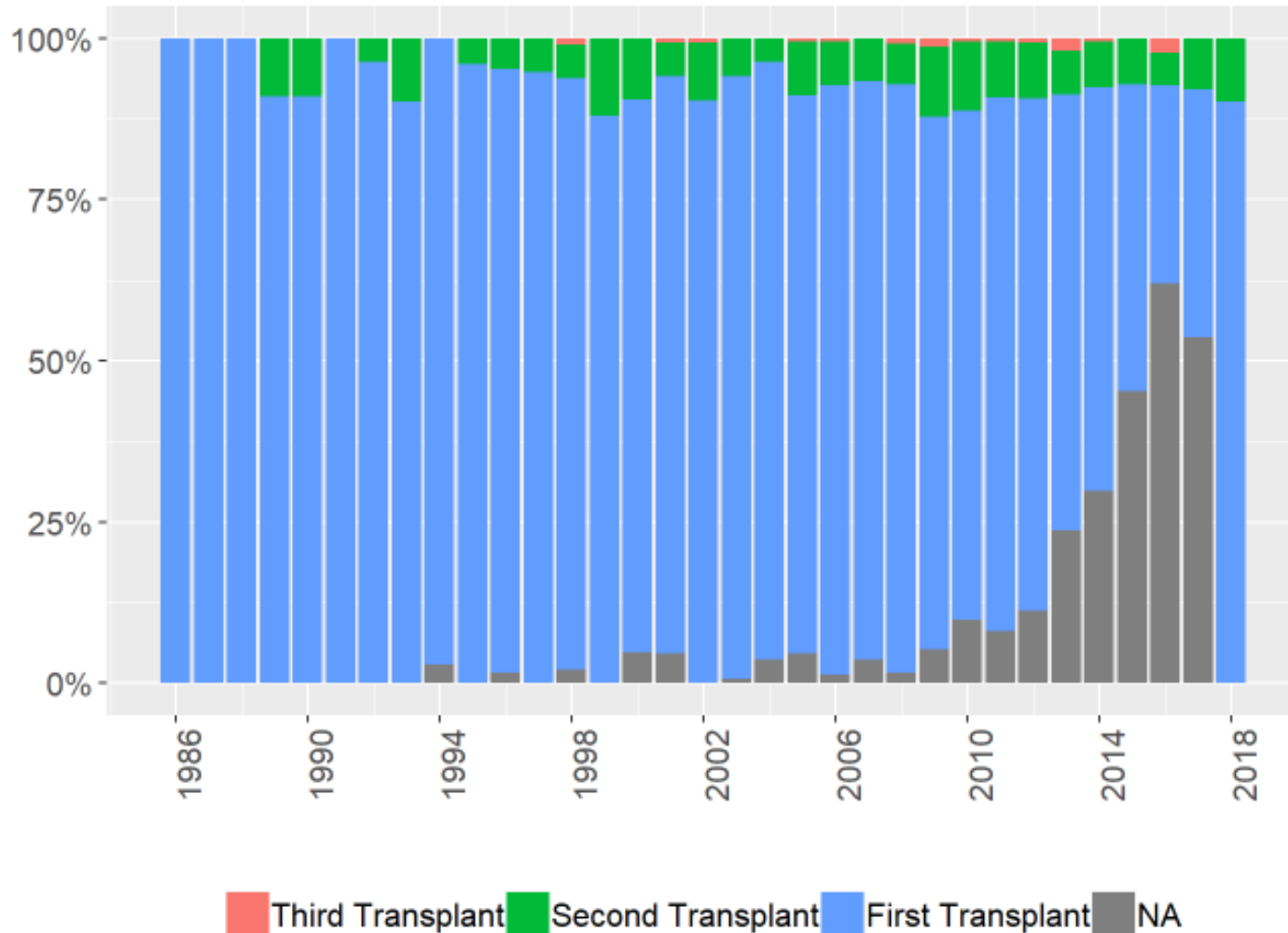


■ No Liver ■ Liver Component



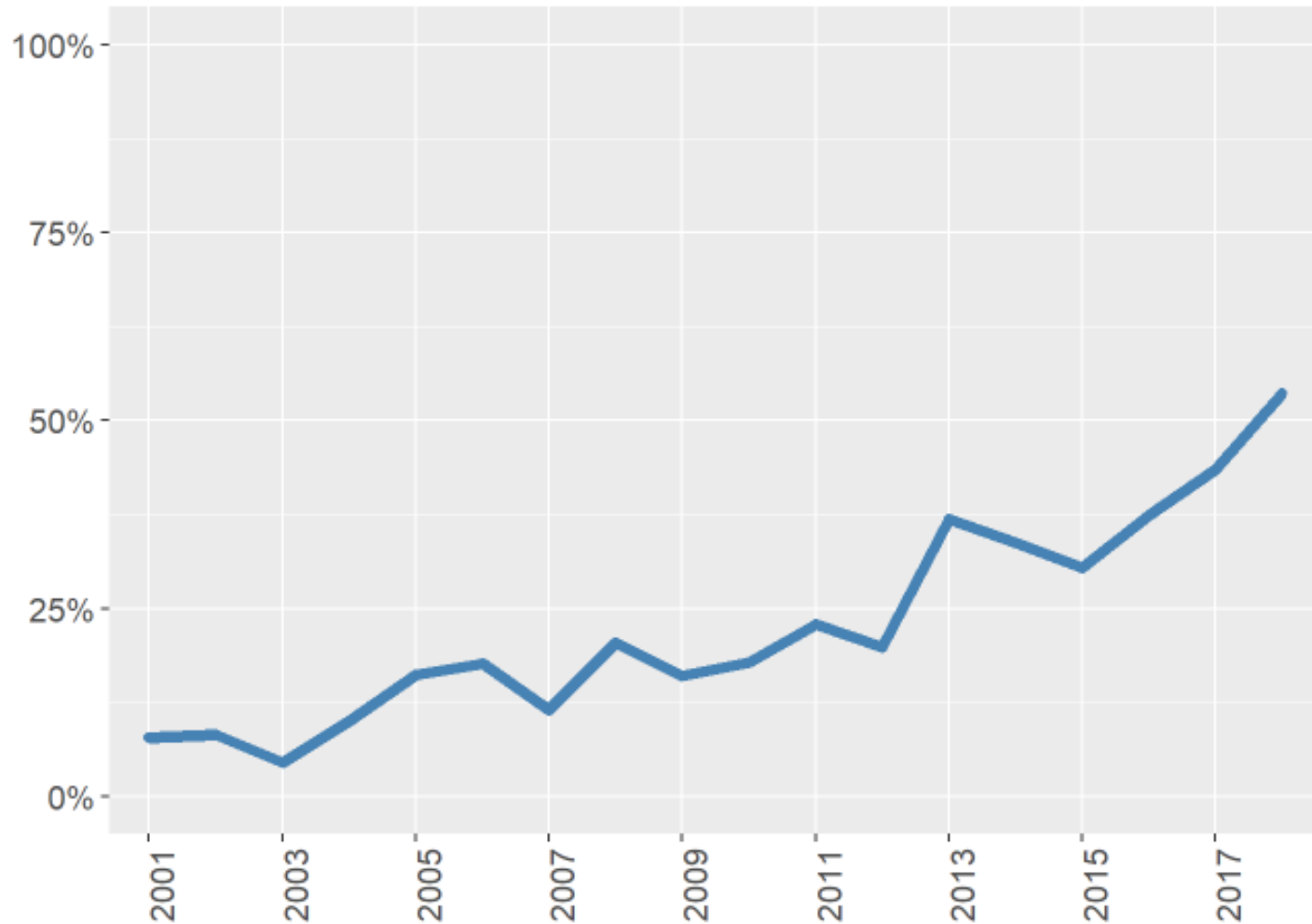
# Re-Transplant Rates

All recipients transplanted between Jan 1985-Dec 2018



# Colon Inclusion Over Time

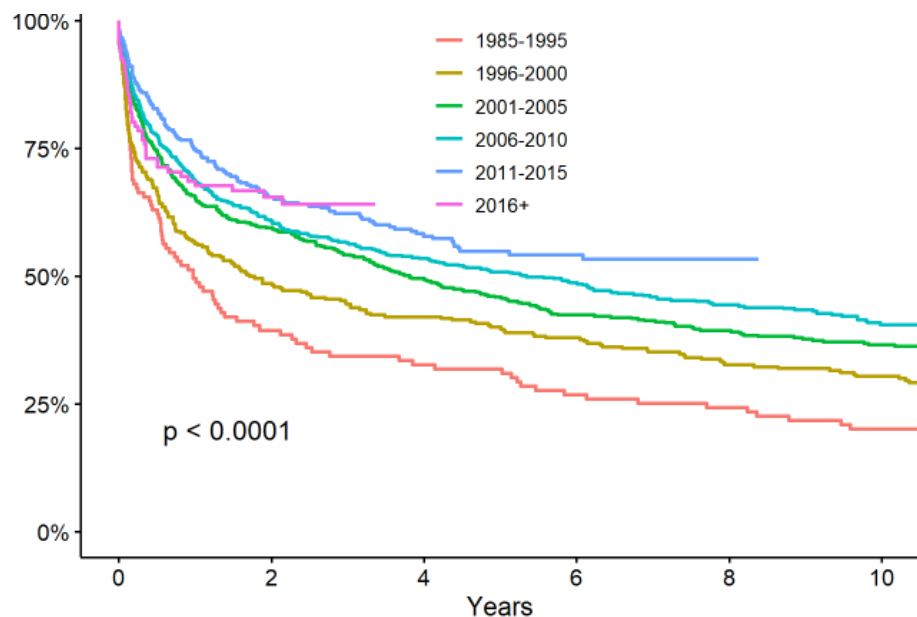
All recipients transplanted between Jan 1985-Dec 2018



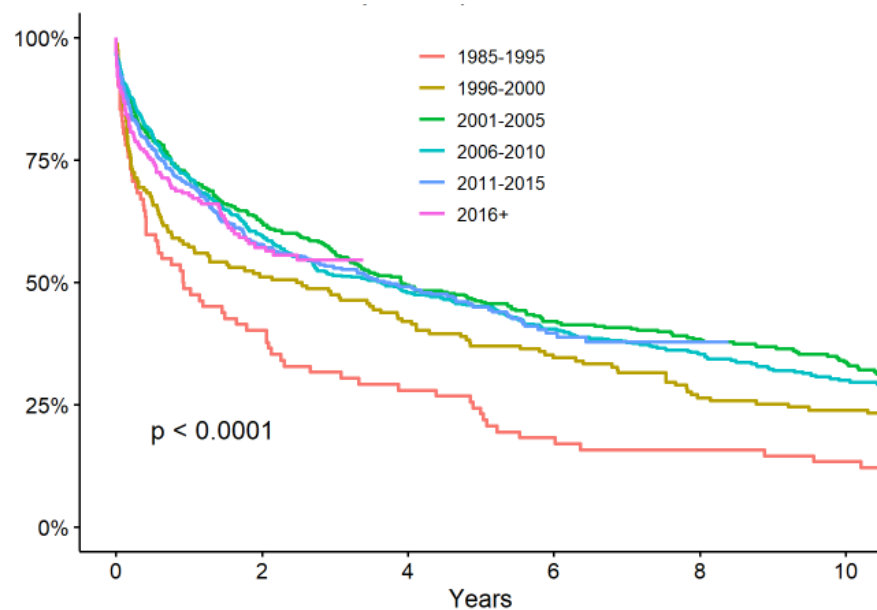
# Trends in Graft & Patient Survival

# Graft Survival by Era

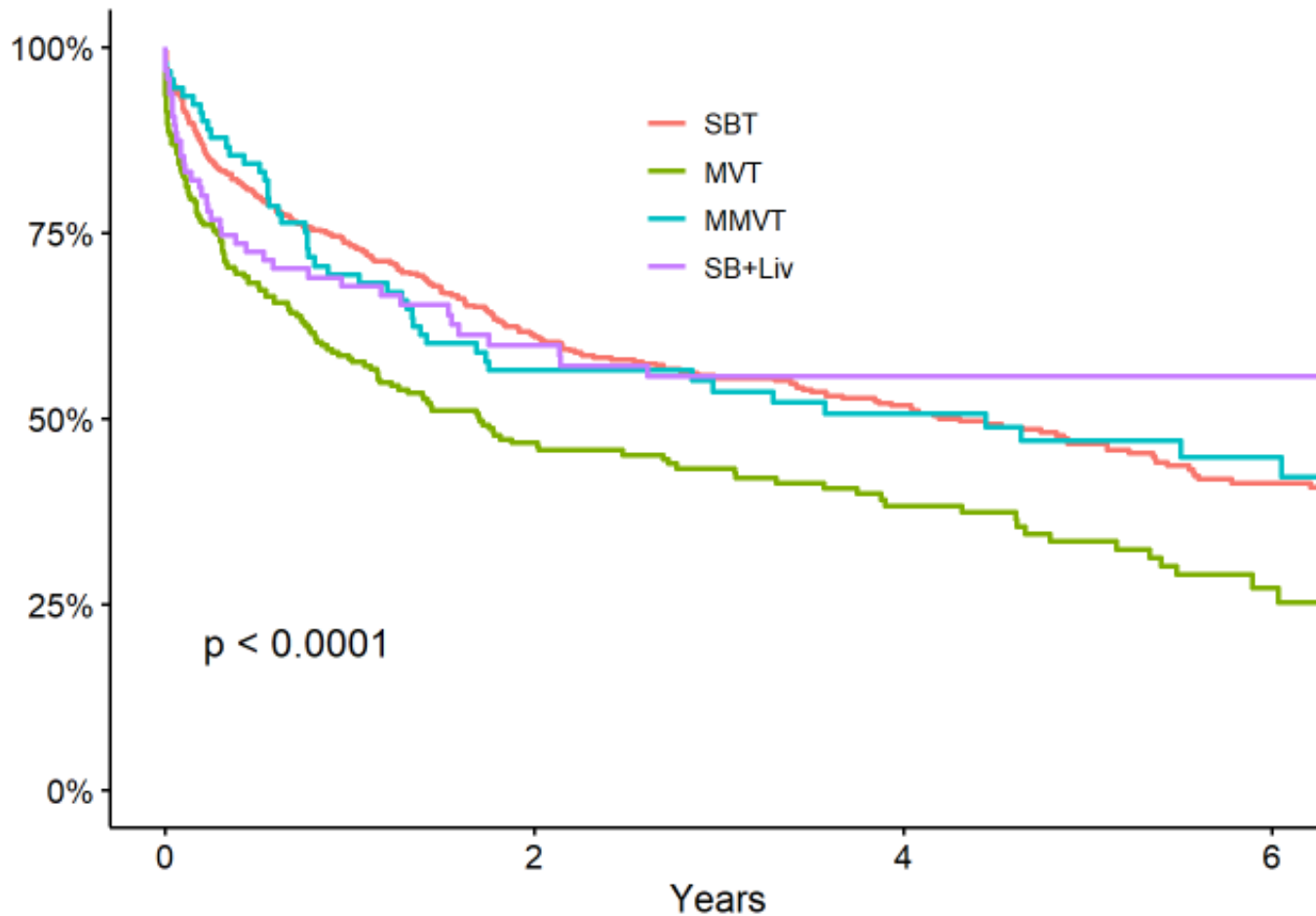
## Pediatric, n=2096



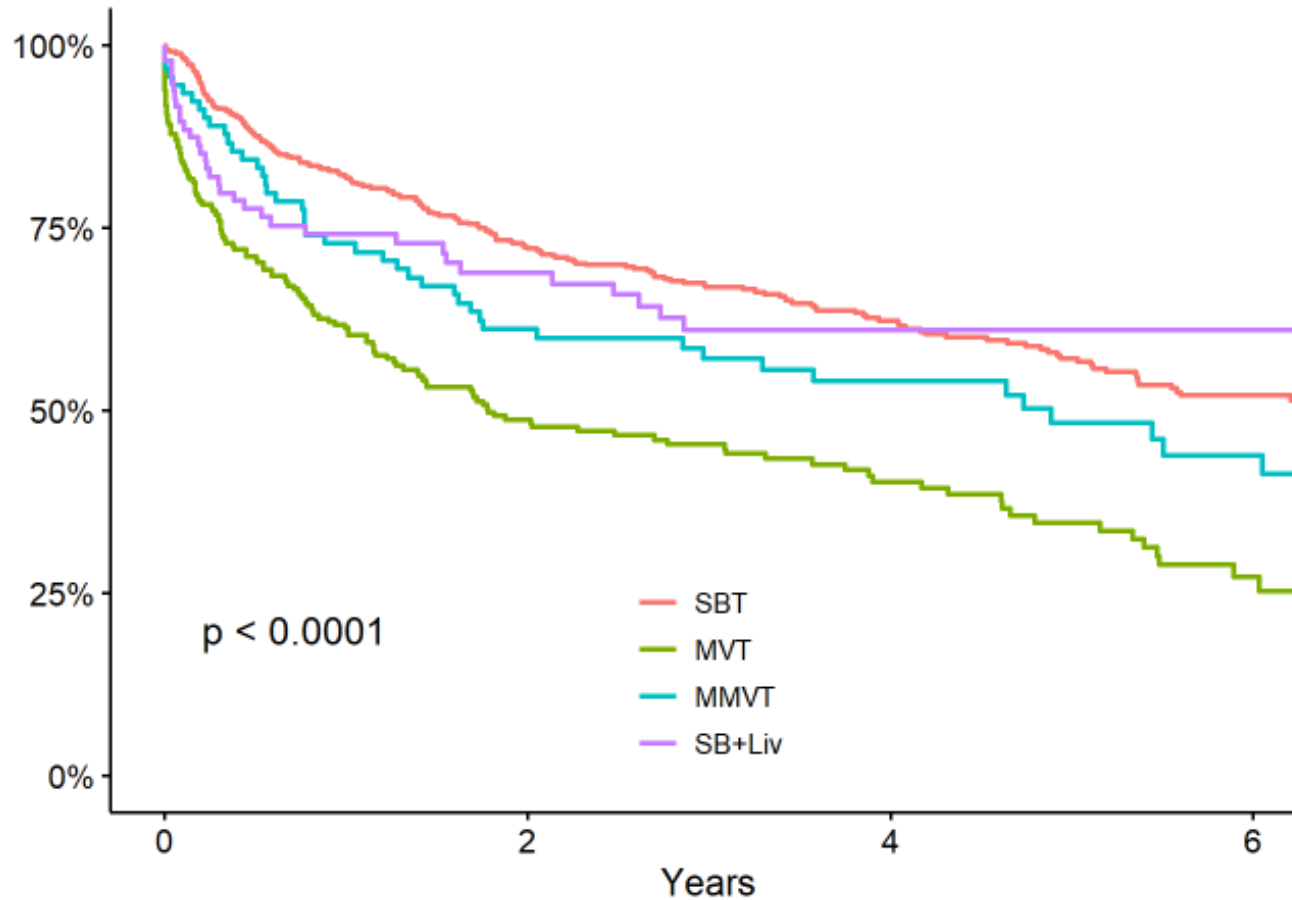
## Adults, n=1951



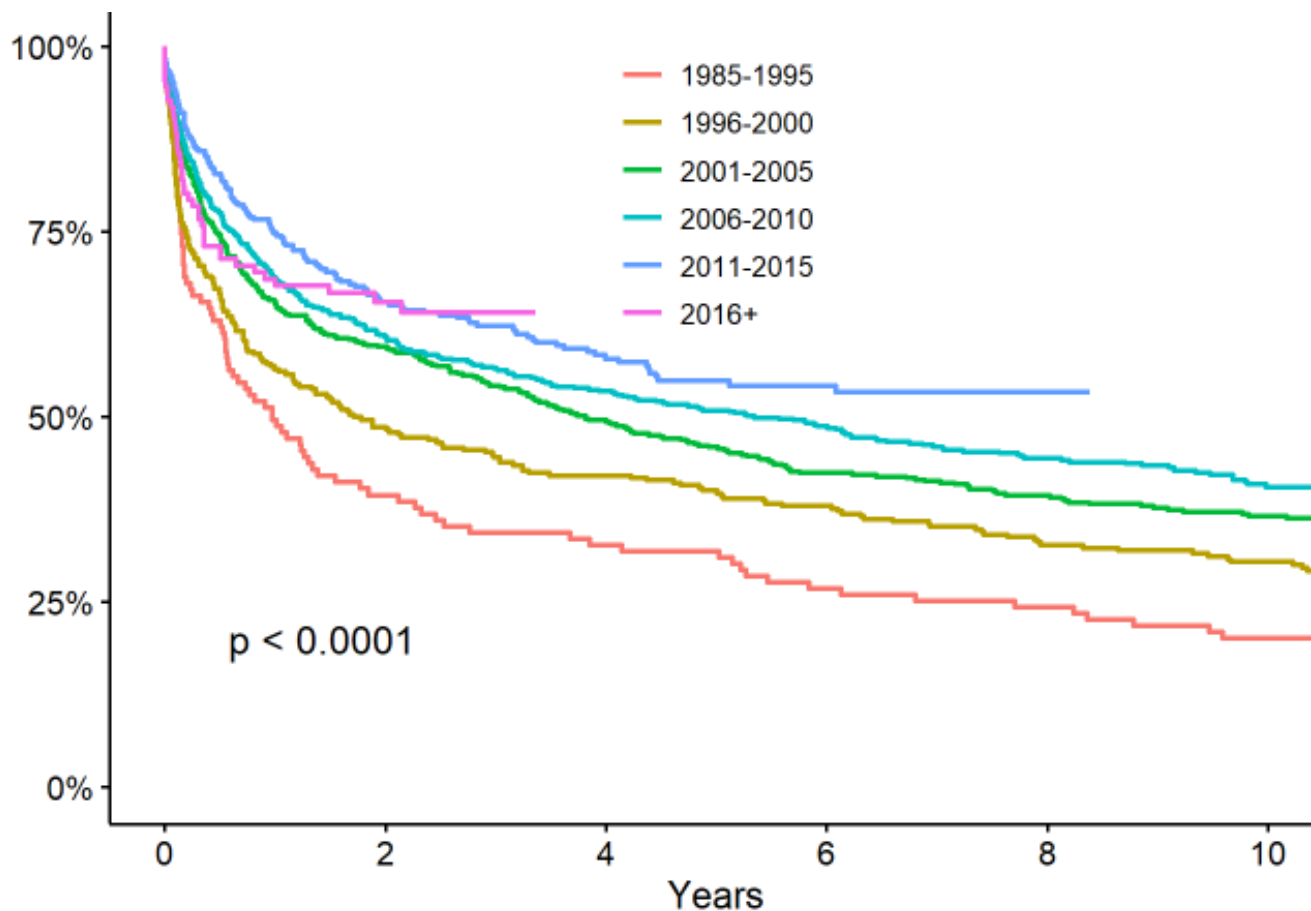
# Adult Graft Survival by Transplant Type (2009-2018)



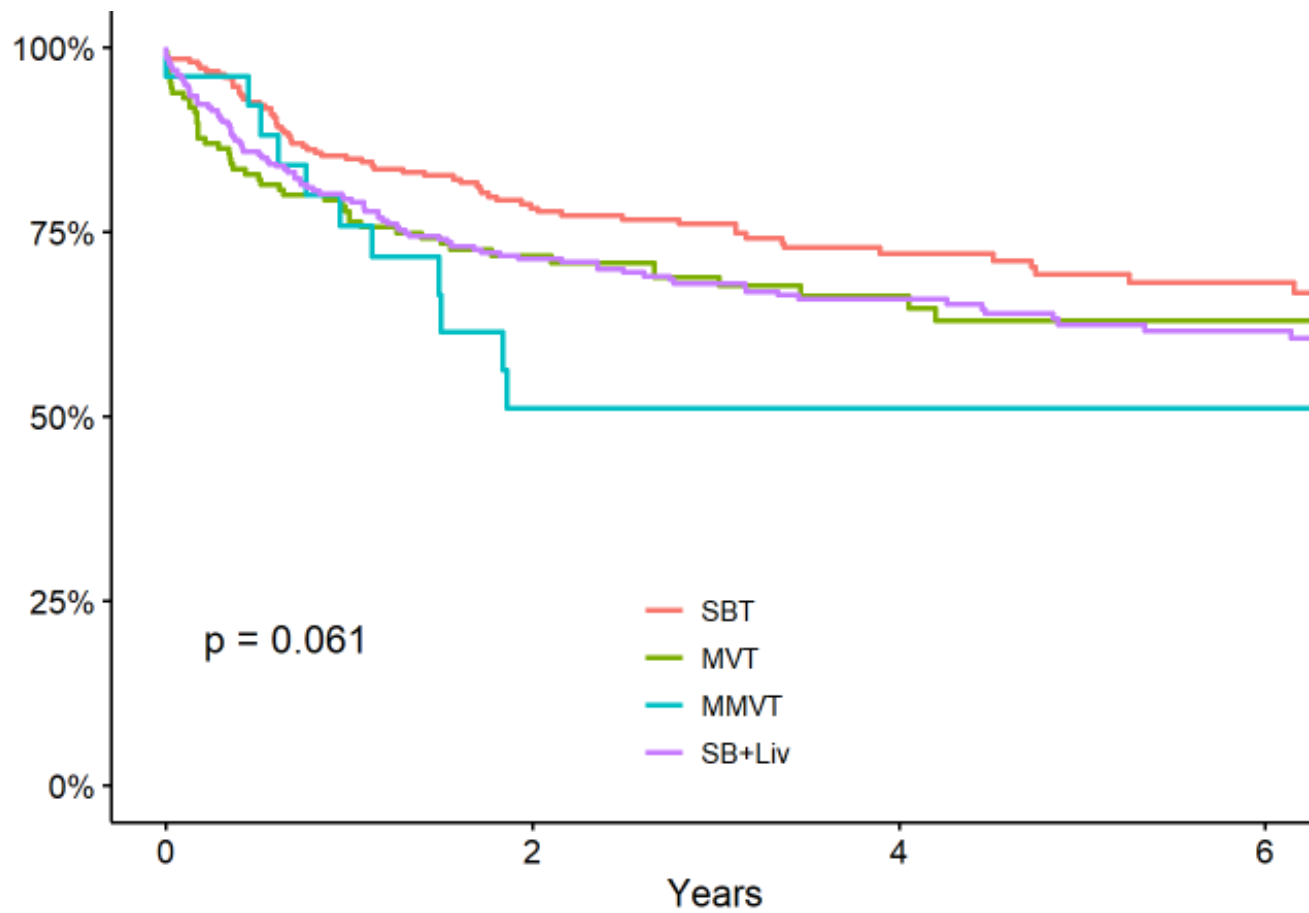
# Adult Patient Survival by Transplant Type (2009-2018)



# Pediatric Graft Survival by Transplant Type (2009-2018)

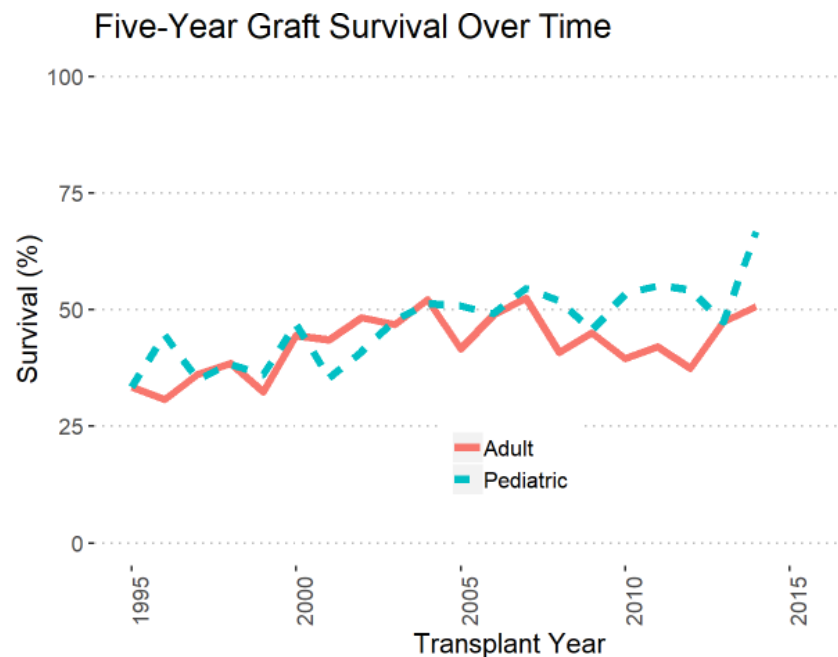
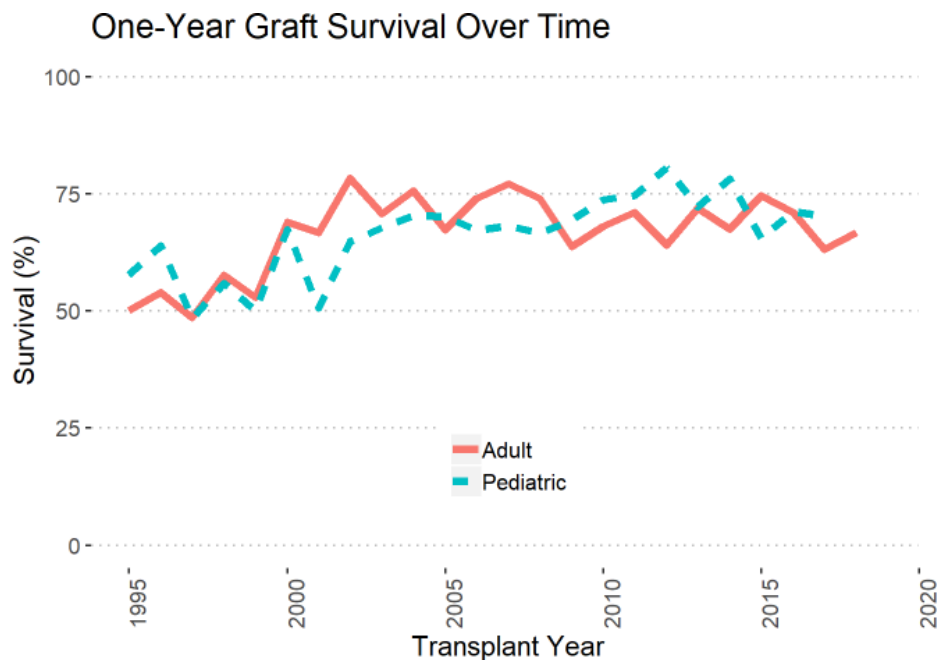


# Pediatric Patient Survival by Transplant Type (2009-2018)



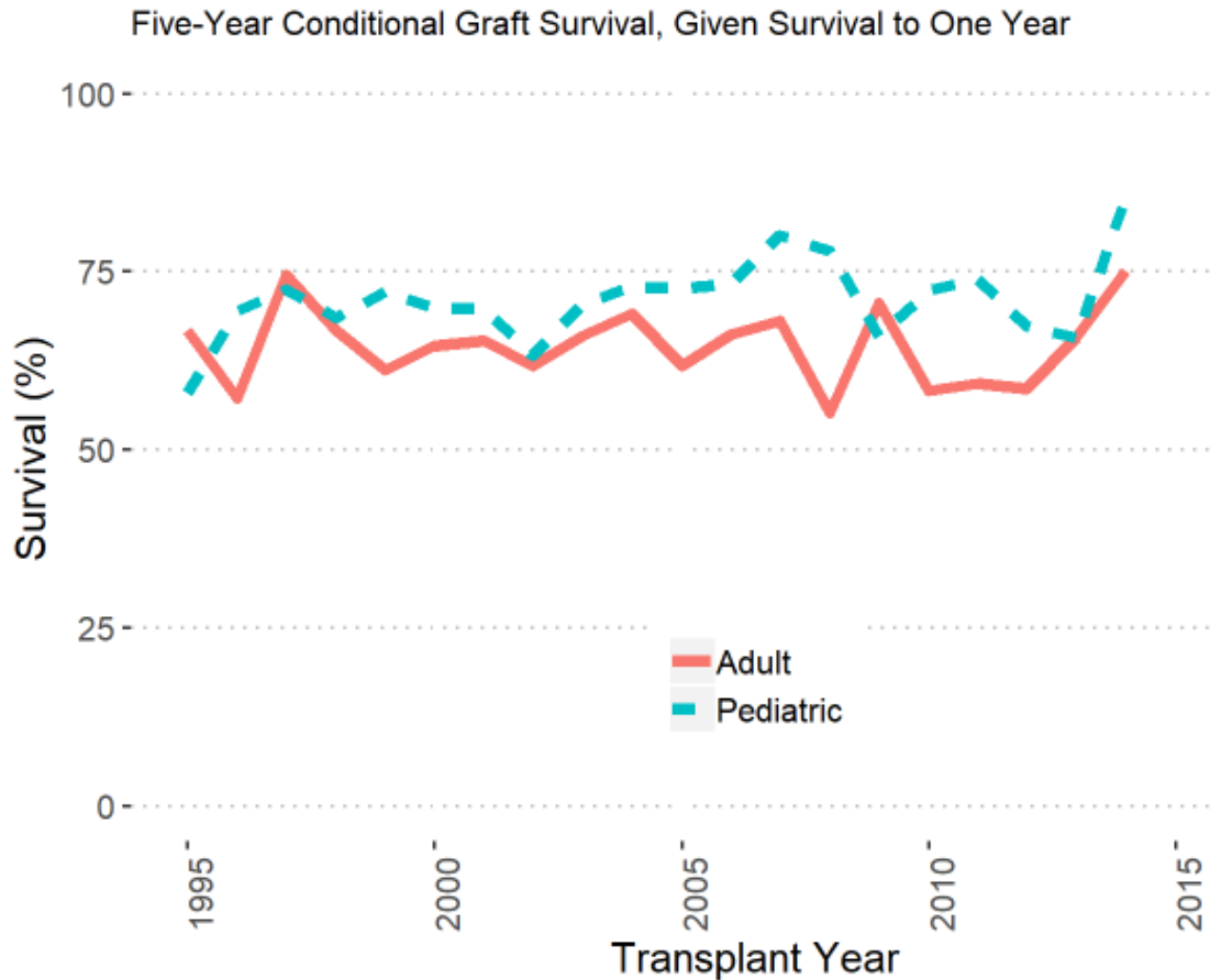


# Actuarial Graft Survival Over Time (All Recipients)



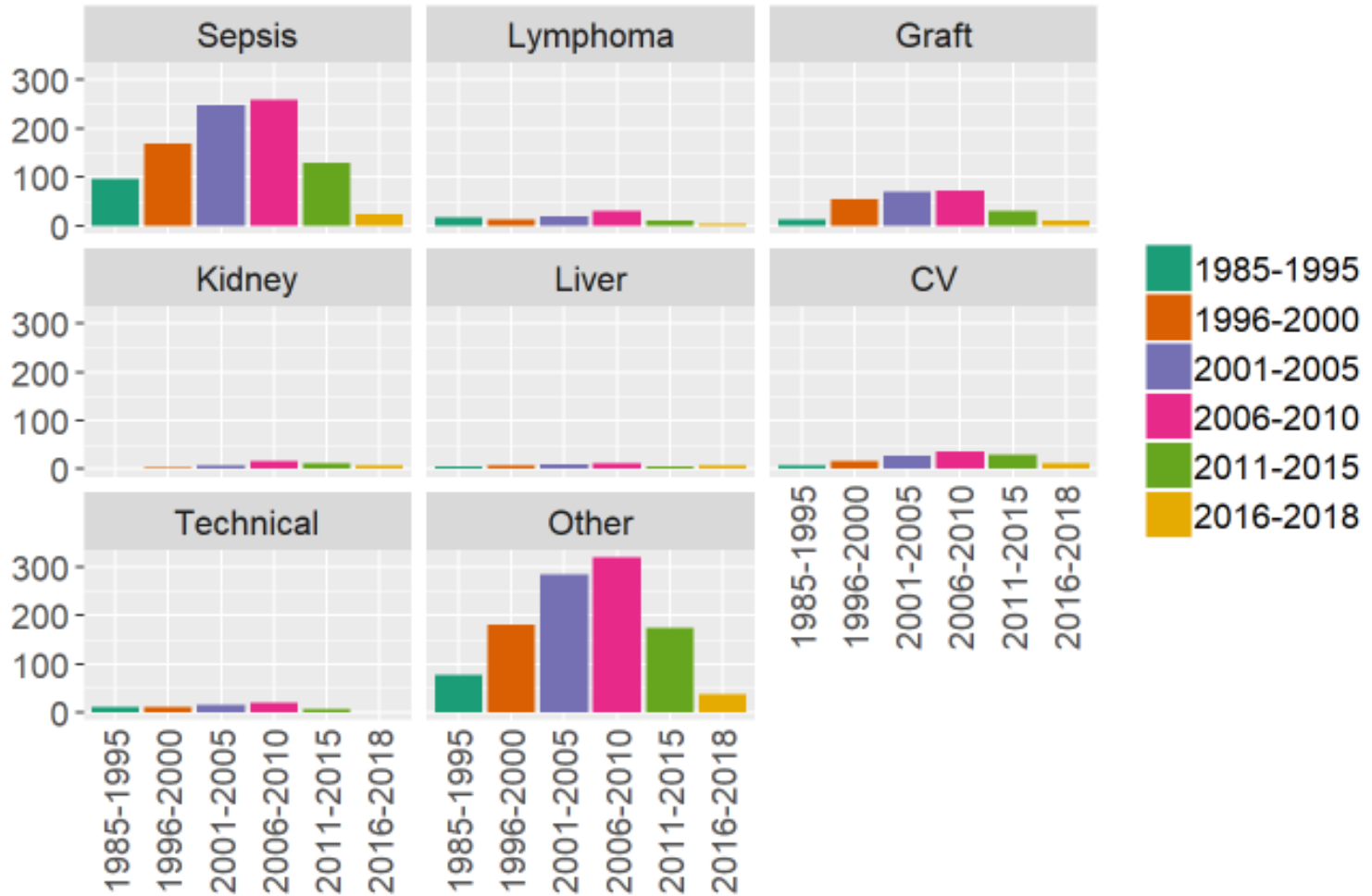
# Conditional 5-yr Graft Survival Rates Over Time

(examining only those recipients who survived for at least one year post-transplant)



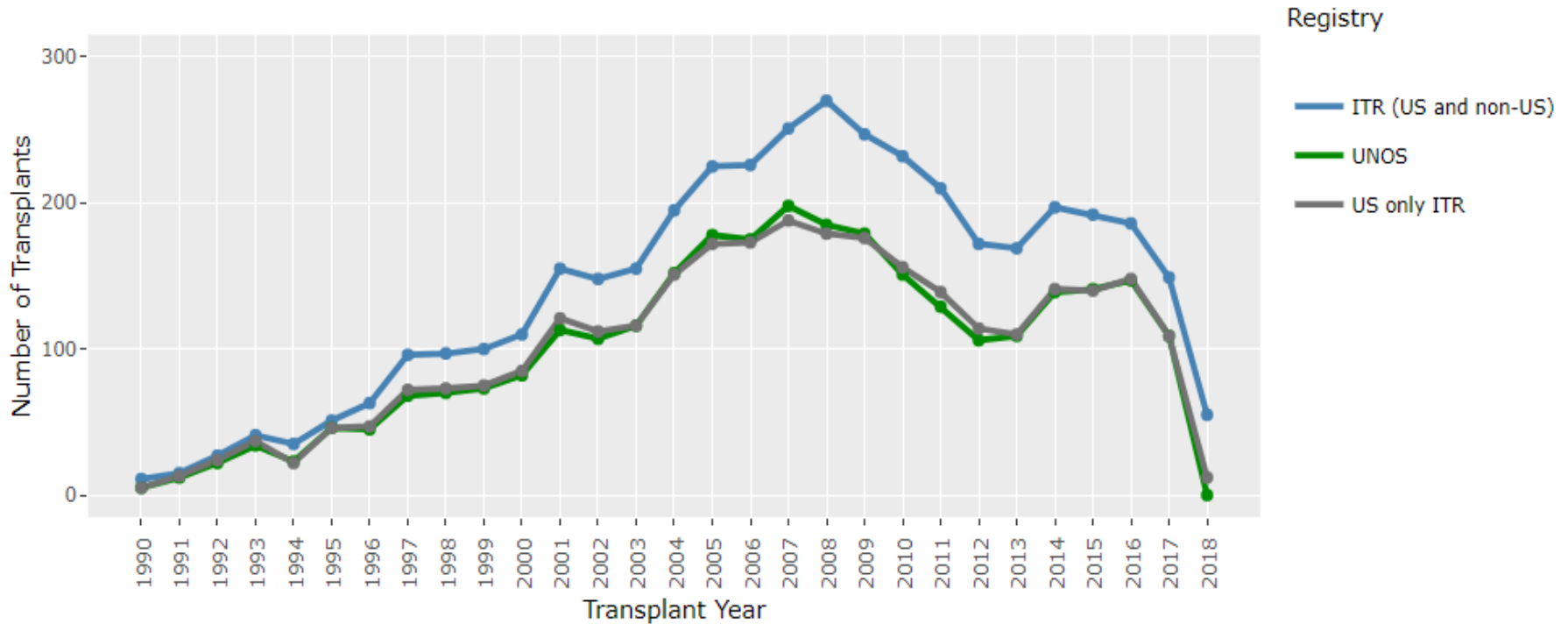
# Causes of Death

Jan 1985 – Dec 2018



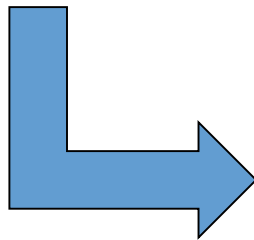
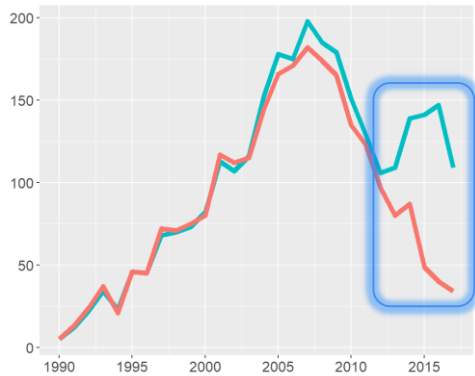
# Conclusions

# Transplants by Year

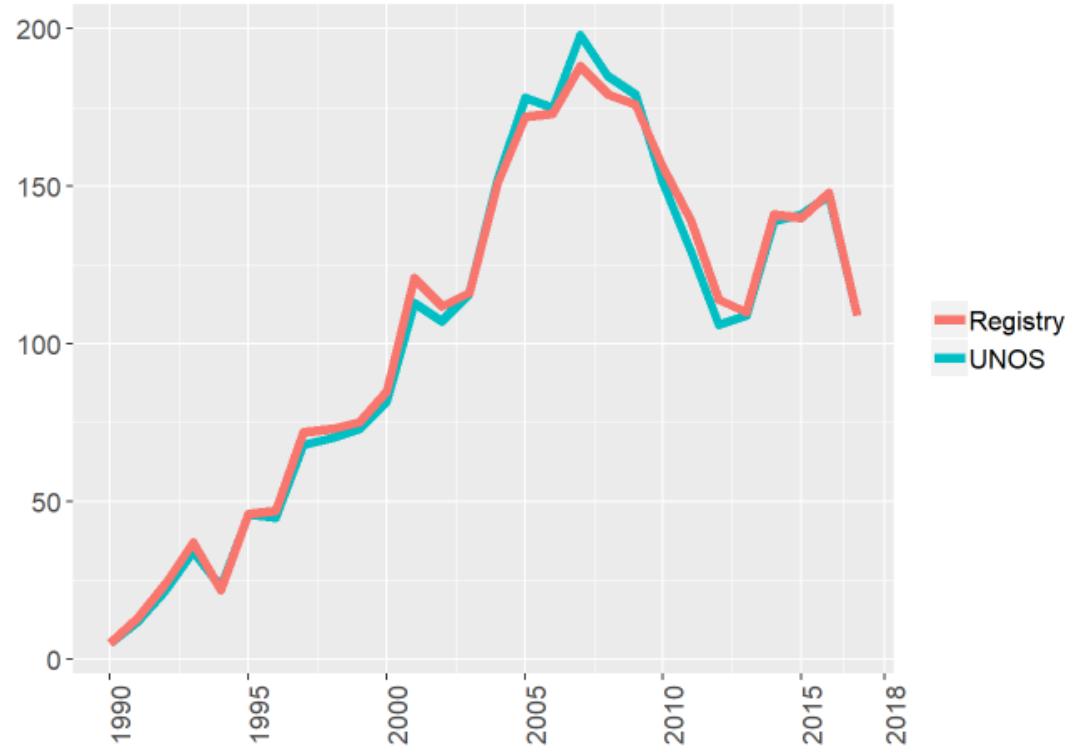


# Intestinal Transplants Performed: US vs. UNOS

2018 Registry Report:



2019 Registry Report:



# Missing Fields - Major Issues:

- Baseline Intake Form:
  - Total Graft Storage Time
  - Wait time
  - Induction Immunosuppression
  - ABO Compatibility
- Transplant Follow-up Form:
  - Patient Status
  - CMV in last 12 months
  - EBV in last 12 months
- Entire forms are missing for patients:
  - CMV/EBV Serostatus Form
  - Recipient HLA Typing Form
  - Donor HLA Typing Form
  - HLA Antibody Testing Form (*@ baseline & follow-up*)

# Donor Specific Antibodies (DSA)

Pre-Transplant DSA:

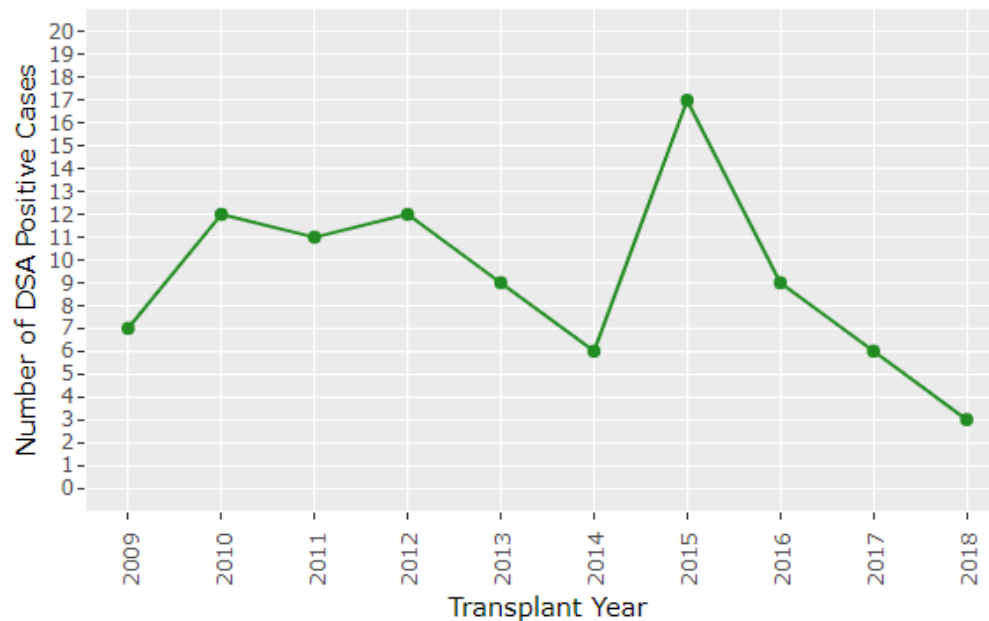
- Class I: 27 cases
- Class II: 31 cases

De Novo DSA:

- 139 cases

LOW  
REPORTING

## Post-Transplant DSA Positive Cases:





# Moving forward...

- Encourage continuous data entry from registry centers
- “Field Guidelines” document
- Data Quality: DSA, Biopsy, PTLD
- Center dashboards (monthly)
- Regular reporting to Scientific Committee:
  - Address missing fields

**Thank you!**  
**Merci!**

