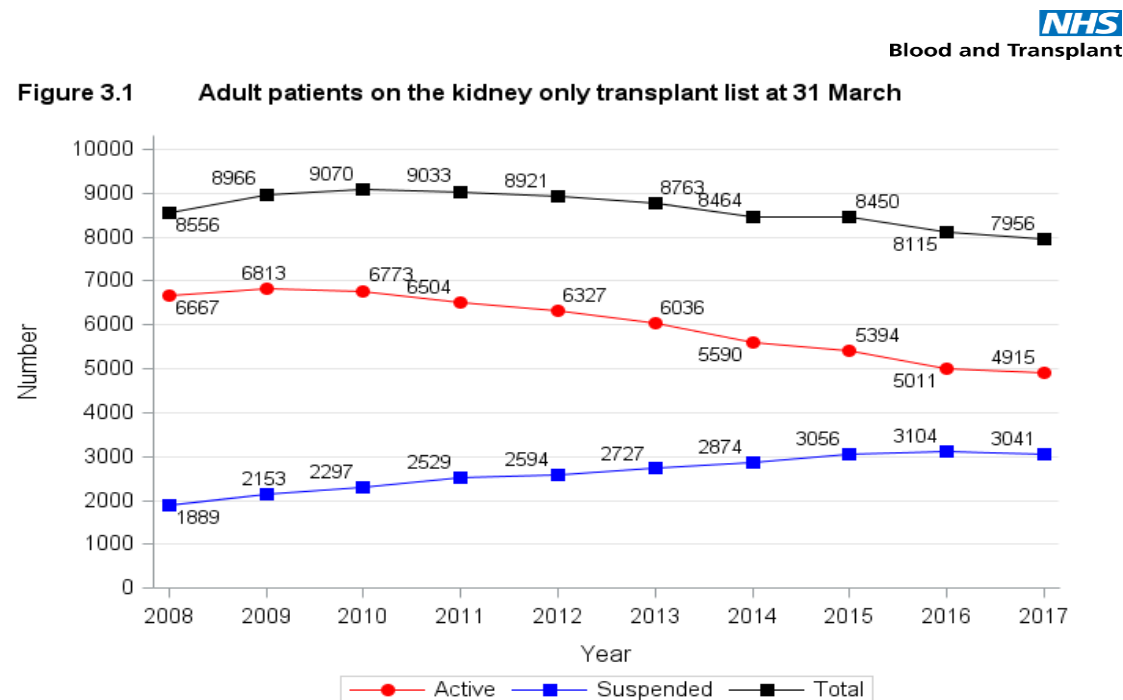


Outcomes of recipients of a kidney transplant who have been suspended from the National Kidney Transplant Waiting List (NKTWL)

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Introduction

- Increasing numbers of patients SUSPENDED on the NKTWL.
- The impact of a suspension event on survival following kidney transplantation is unknown.



Proportional changes on the NKTWL 2008-2017

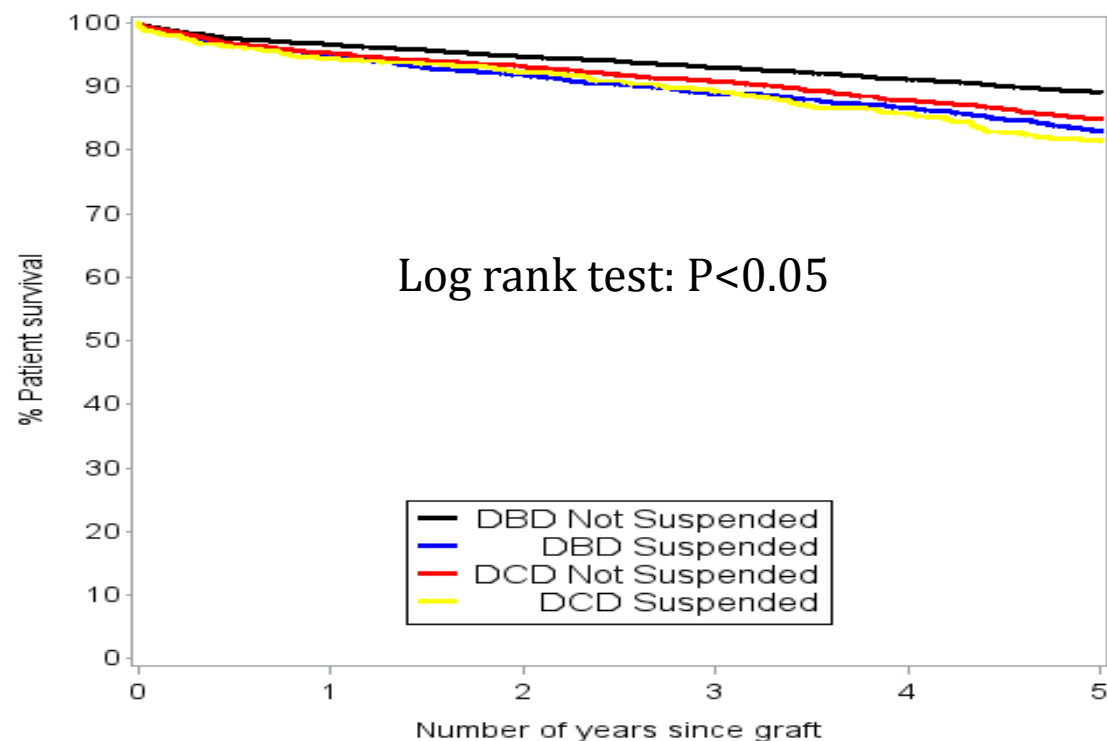
- Total patients: 7.0% decrease
- Active patients: 26% decrease
- Suspended patients: 61% increase

Methods

- NHSBT Kidney Transplant Registry linked to Office of National Statistics (ONS) mortality data.
- Study population
 - First deceased donor kidney transplants between 1/1/2000 and 31/12/2010.
 - Categorized according to whether they had experienced a suspension event.
- Suspension event:
 - Patient suspended for 30 days or more during entire registration
 - Excluded patients suspended in the first 90 days (n=1014).
- Kaplan-Meier and Cox regression methods to assess outcomes following transplantation.

Results: Patient Survival

Kaplan-Meier 5-year patient survival (n=12,230)



5-year estimates:

Suspension event (n=3286):

- DBD: 83%

- DCD: 81%

No suspension event (n=8944):

- DBD: 89%

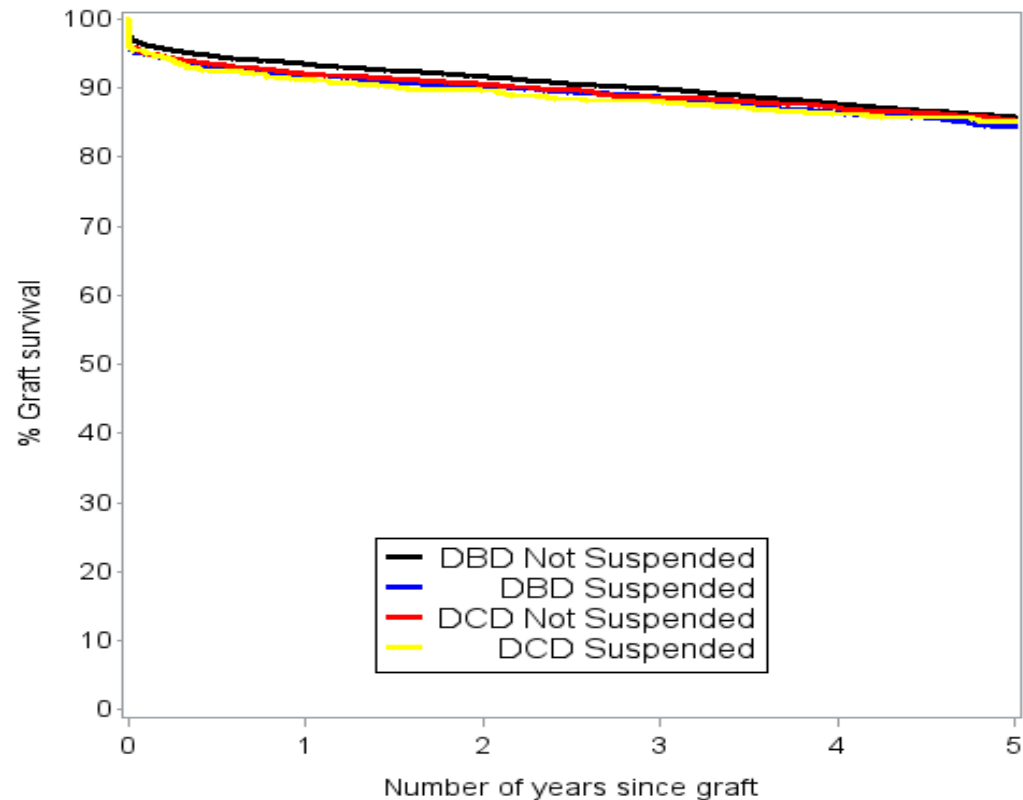
- DCD: 85%

Cox regression: Suspension event vs non-suspension event: HR 1.21 (1.08– 1.37)

- No significant effect on outcome: donor type (DBD/DCD) and sensitisation status.

Results: Graft Survival

Kaplan-Meier 5-year graft survival (n=12,222)



5-year estimates:

Suspension event (n=3285)

- DBD: 84%

- DCD: 85%

No suspension event (n=8937)

- DBD: 86%

- DCD: 85%

Cox regression: Suspension event vs non-suspension event: HR 1.18 (1.05– 1.32)

Key findings and questions

- A suspension event is associated with worse survival following kidney transplantation.
- Patients who experience a suspension event have an increased risk of death at 5-years following kidney transplant (HR 1.21).
- What are the outcomes of all patients suspended on the NKTWL?

Outcomes from listing of ALL patients suspended on the NKTWL (n=13,332)

- Poster No: P115

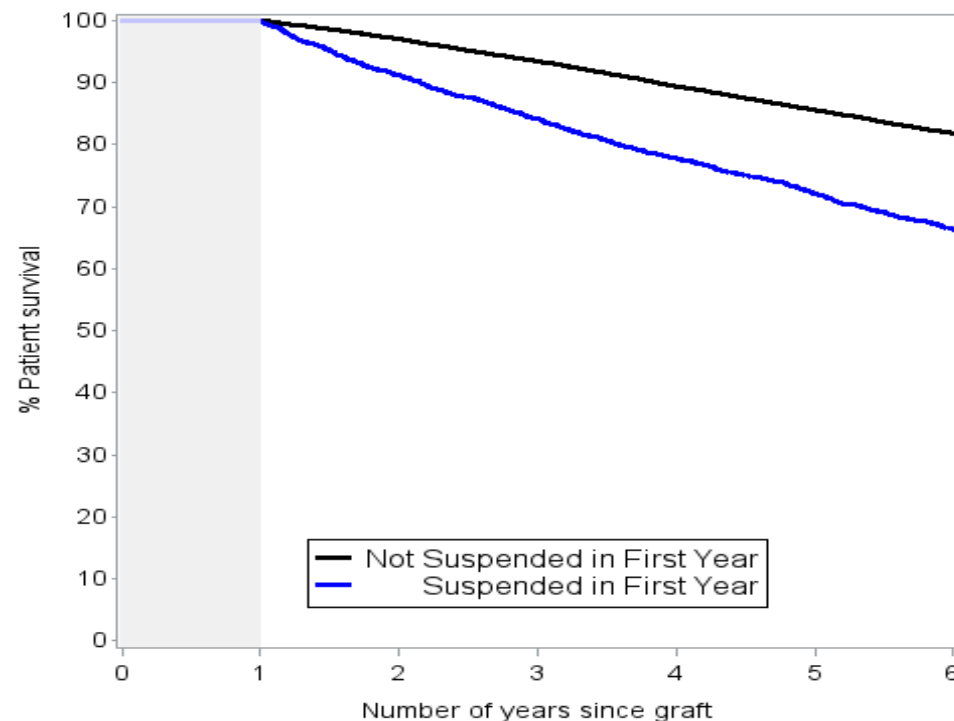
	Not suspended N=11,101 (83.3%)		Suspended N=2221 (16.7%)	
	Not-transplanted N=3878 (29%)	Transplanted N=7223 (54%)	Not-transplanted N=1225 (9%)	Transplanted N=996 (7%)
Total number deceased	1563	550	588	105
Total proportion deceased	40%	8%	48%	11%

- Study date: 1st Jan 2000 – 31st Dec 2010.
- Patient experiencing a suspension event within the first year.
- Conditional on patients surviving the first year from listing and inclusive of 6 years follow-up.

Patient survival from listing of ALL patients suspend on the NKTWL (n=13,332)

- Poster No: P115

Patient survival from listing, stratified by suspension status (n=13,322)



6-year KM survival estimates

Not suspended: 82% (CI: 81-82%)

Suspended: 62% (CI: 64-68%)

Cox Regression:

HR 1.78 (1.63-1.94)

Conditional on patients survival until 1-year from listing

Important questions

- What are the patient factors that can lead to a suspension event?
 - Are they the same as those that lead to death on the NKTWL?
 - Are they potentially avoidable?
 - Monitoring on the NKTWL
 - Prioritisation on clinical criteria
- How can we mitigate the effect of a suspension event on outcomes?
 - Time from suspension event (or return to the NKTWL) to transplantation

Conclusion

- A suspension event on the NKTWL is associated with a worse 5-year patient survival compared to those who have not been suspended.
- How can we best mitigate against the impact of a suspension event?
 - Prevention
 - Prioritisation
 - Mitigation

Appendix: Patient characteristics

Patient characteristics	No suspension event (n=8956)	Suspension event (n=3297)
Female Sex	37%	40.4%
Non-white ethnicity	18.7%	28.3%
Age group		
18 – 34	17.8%	13.4%
35 – 49	36.0%	33.4%
50 – 59	26.0%	31.2%
60 – 69	17.5%	19.4%
70+	2.7%	2.6%
Disease group		
HTN	5.8%	7.6%
Diabetes	7.0%	8.7%
Polycystic Kidneys	14.0%	14.2%
Pyelonephritis	7.9%	6.9%
Glomerulonephritis	16.8%	15.6%
Other	13.9%	14.0%
Not reported	34.6%	33.1%
Sensitisation Status		
Not highly sensitised	98.7%	97.8%
Highly sensitised (>85%)	1.3%	2.2%