

# **Living Donor Kidney Transplantation**

Overview of Activity and Performance

Matthew Robb



#### **Overview**

- Activity
  - National figures
  - Demographics
  - Outcomes
- UK Living Kidney Sharing Scheme
  - Activity
  - Non-proceeding transplants
  - Altruistic donation

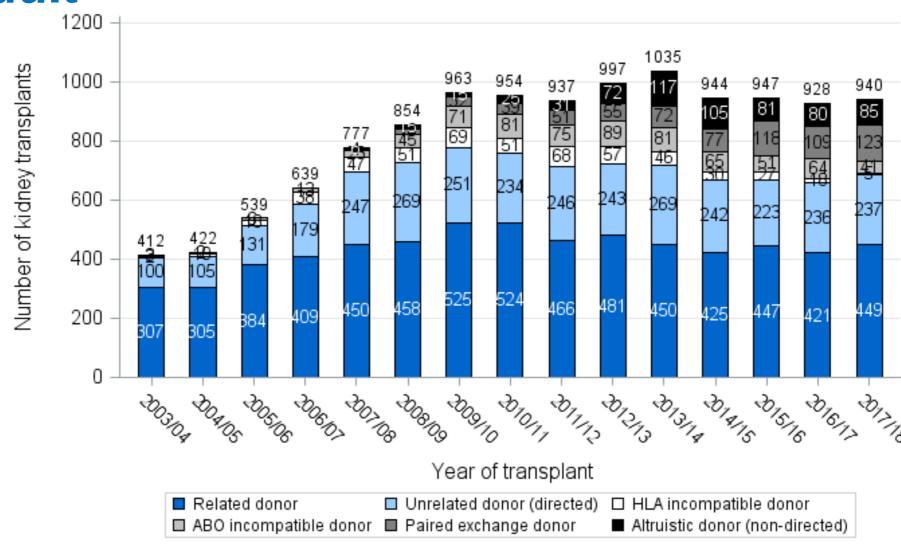


# **Activity**



# Living donor kidney transplants by type

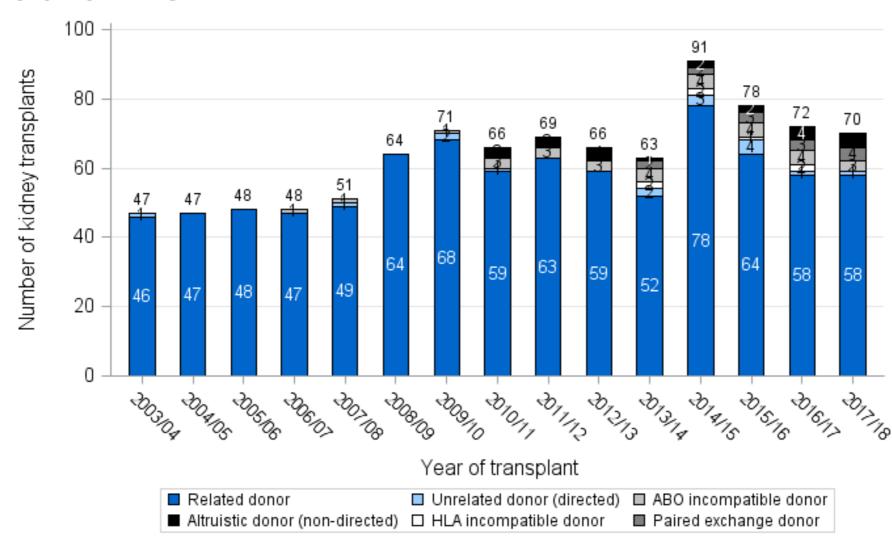
- Adult





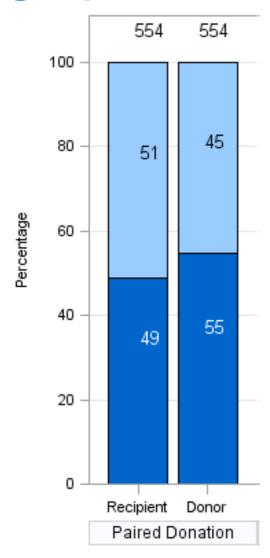
# Living donor kidney transplants by type

#### - Paediatric



# **Demographics LDKT – Sex**

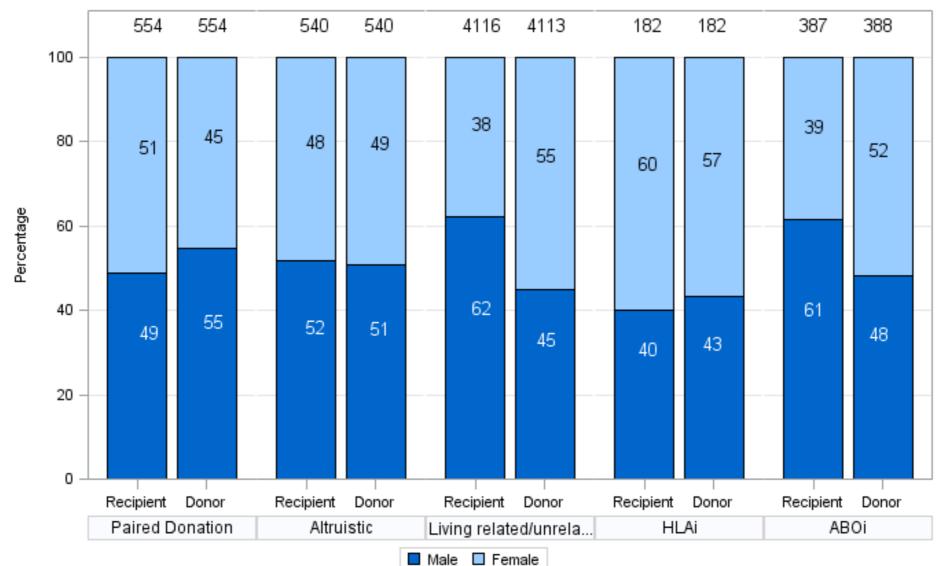






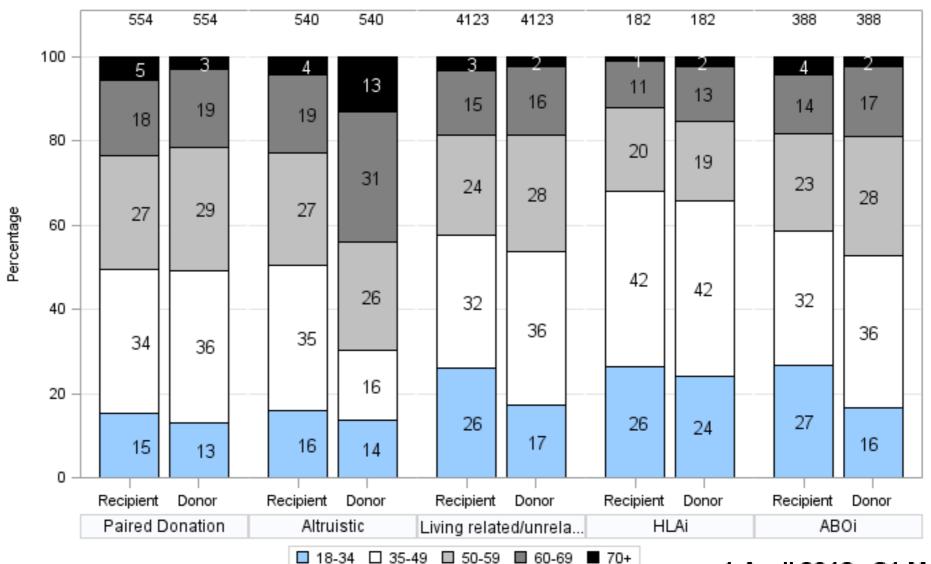
## **Demographics LDKT – Sex**





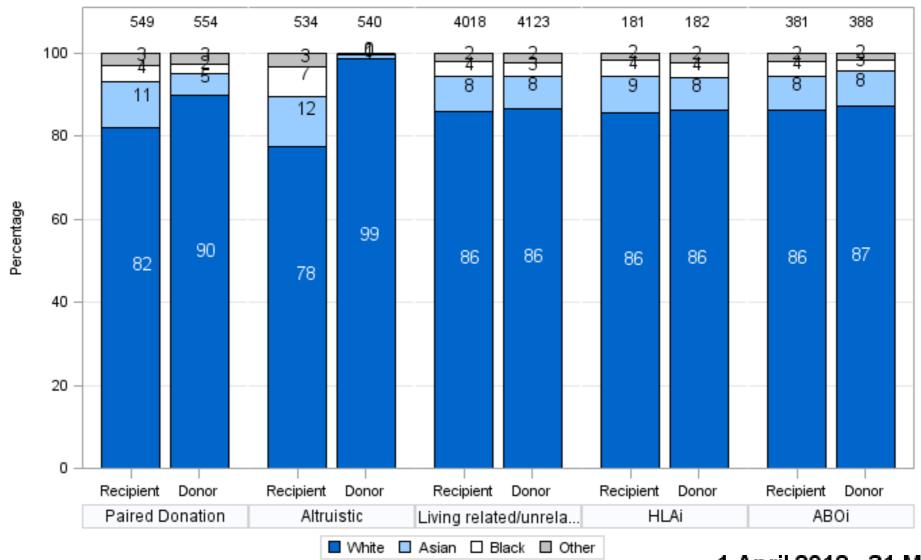
## **Demographics LDKT – Age**





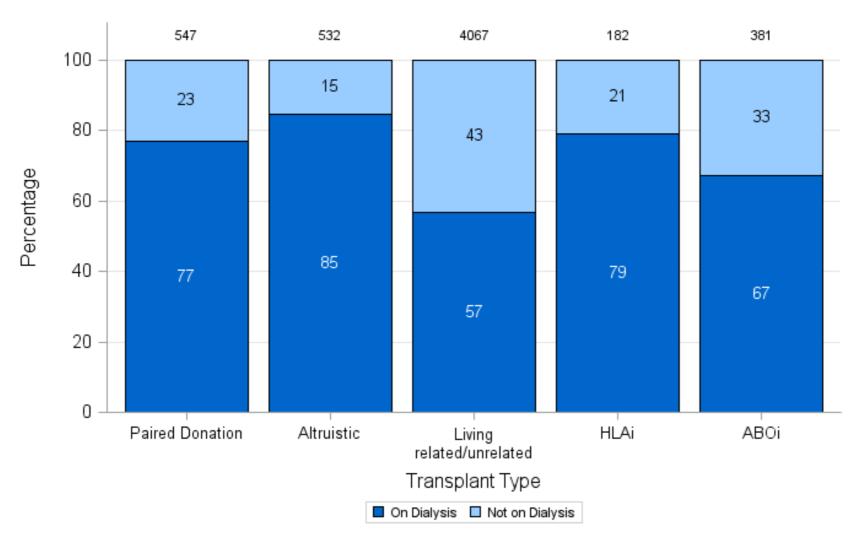
# **Demographics LDKT – Ethnicity**





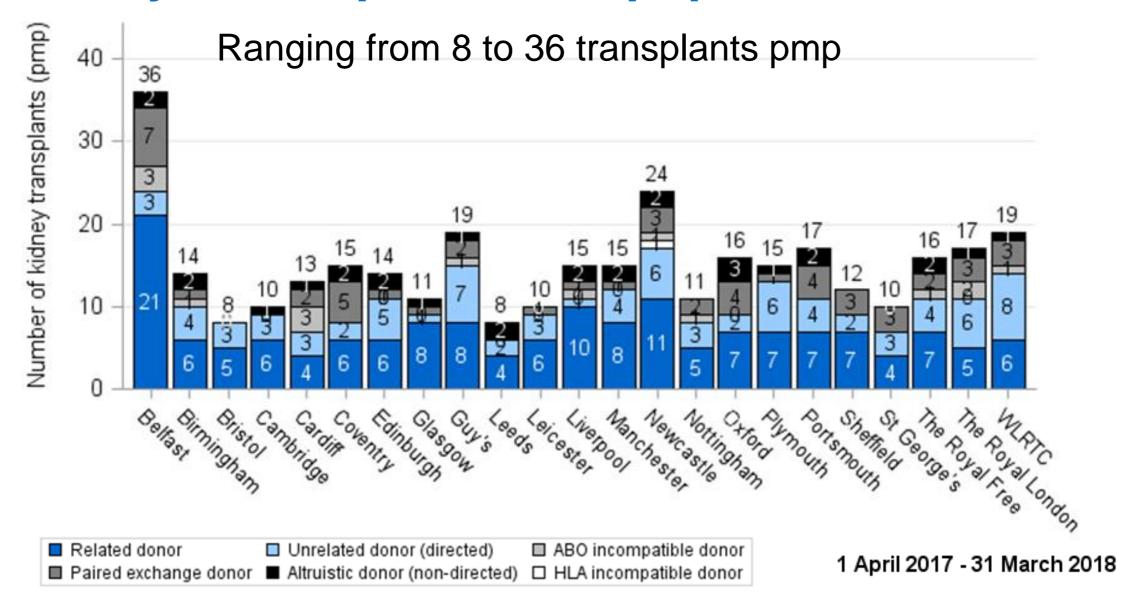
# **Demographics LDKT – Dialysis status**





# LDKT by centre per million population

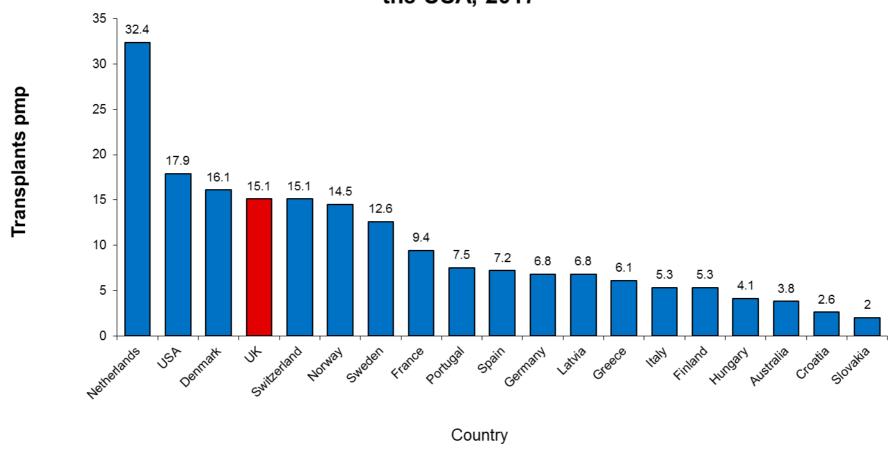




# **International Comparison**



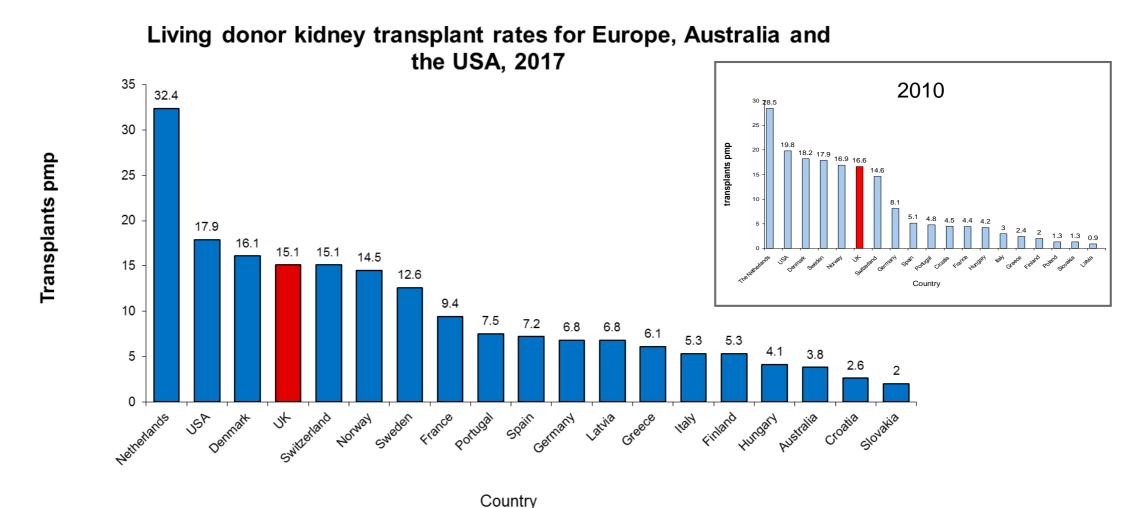
Living donor kidney transplant rates for Europe, Australia and the USA, 2017



Source: Council of Europe – Transplant Newsletter

# **International Comparison**

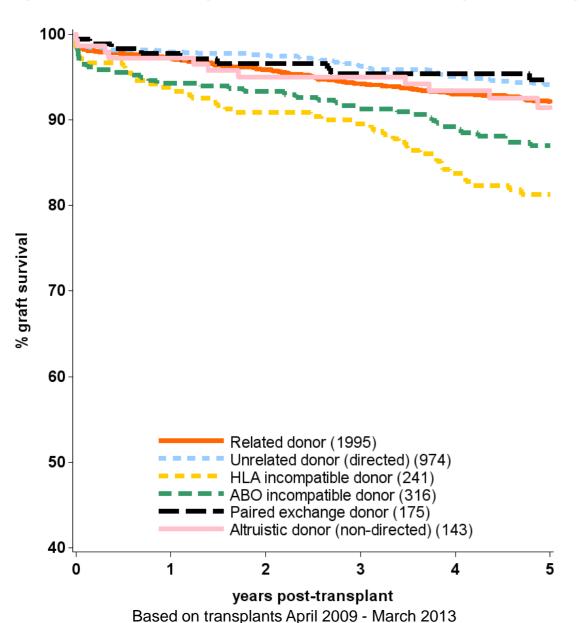


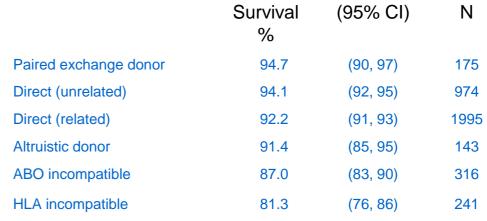


Source: Council of Europe – Transplant Newsletter

#### **Survival Outcomes – Graft Survival**



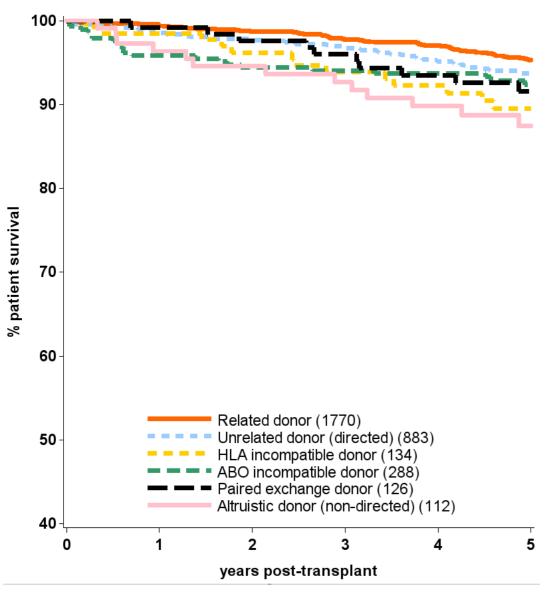




p<0.0001, log-rank test 5df

#### **Survival Outcomes – Patient Survival**





	Survival %	(95% CI)	N
Direct (related)	95.3	(94, 96)	1770
Direct (unrelated)	93.7	(92, 95)	883
ABO incompatible	92.4	(89, 95)	288
Paired exchange donor	91.6	(85, 95)	126
HLA incompatible	89.5	(83, 94)	134
Altruistic donor	87.4	(79, 93)	112

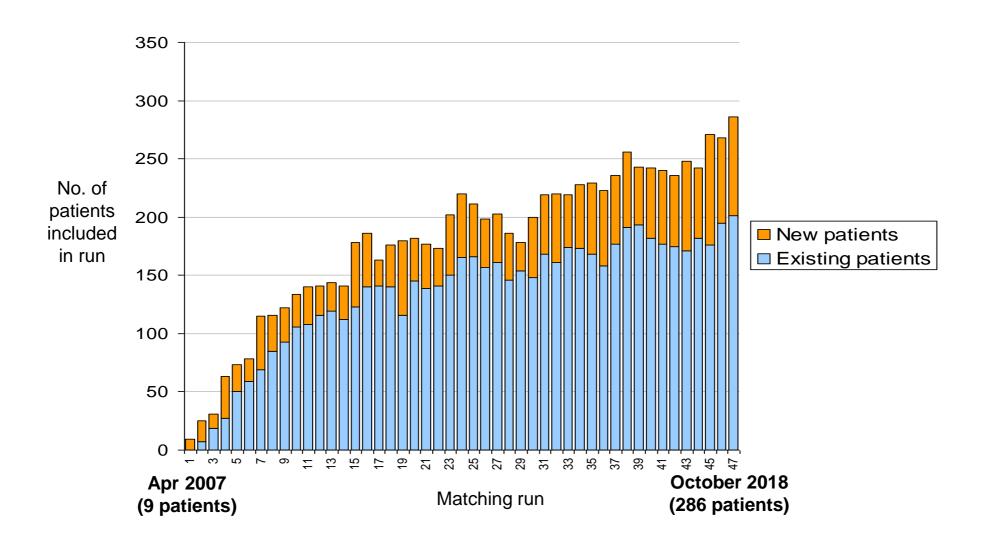
P=0.0006, log-rank test 5df



# **UK Living Kidney Sharing Scheme**

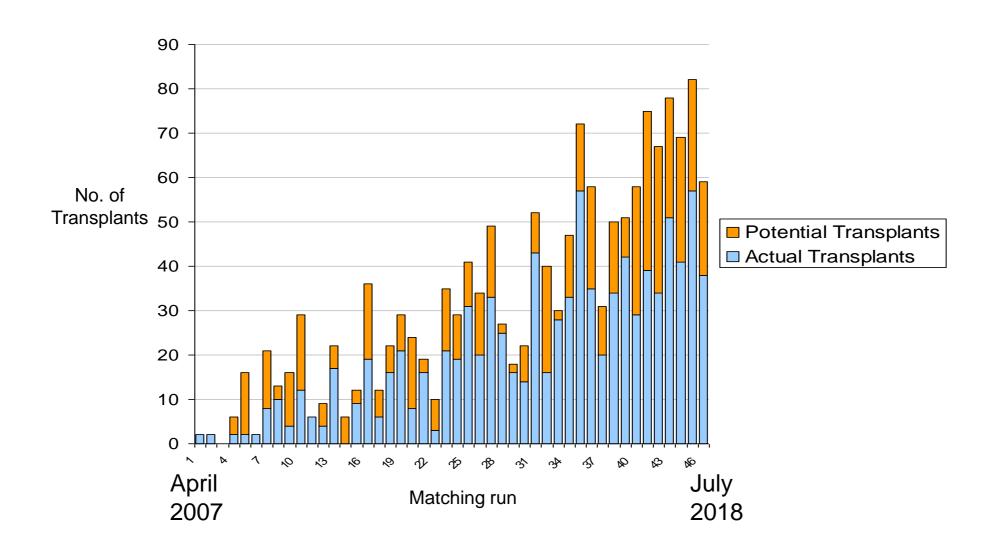
#### **Number of Patients in Quarterly Matching Runs**





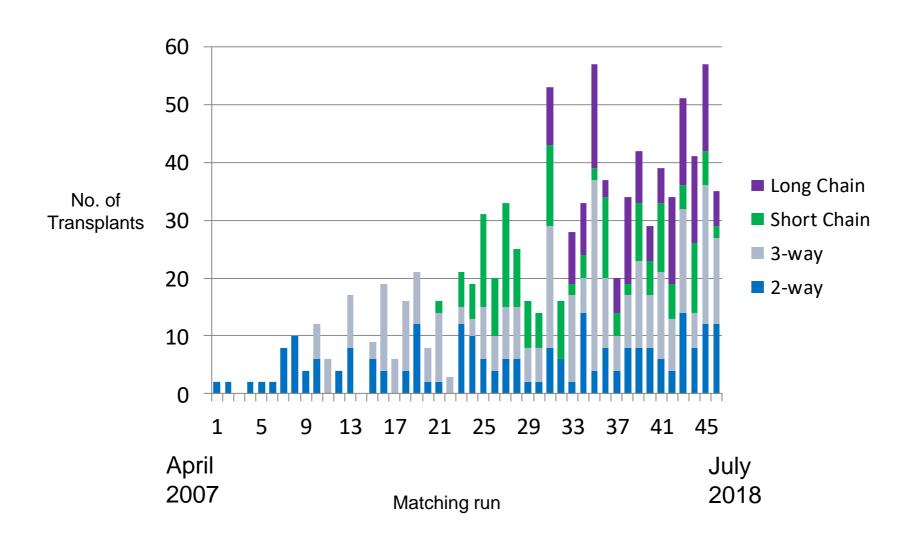
## **Potential and Actual Transplants**





#### **Transplant by Exchange Type**







# Impact of Altruistic Donor Chains - Chance of transplant by blood group

**Pre 2012** 

Recipient ABO

Donor ABO

		0	Α	В	AB
	0	26/133	30/60	7/24	1/2
	0	(20%)	(50%)	(29%)	(50%)
	Λ	30/179	16/68	12/39	0/5
	Α	(17%)	(24%)	(31%)	(0%)
	D	7/53	11/29	1/20	1/3
	В	(13%)	(38%)	(5%)	(33%)
I	<b>^</b> D	0/8	0/3	0/8	0/1
	AB	(0%)	(0%)	(0%)	(0%)



# Impact of Altruistic Donor Chains - Chance of transplant by blood group

2012 onwards

Recipient ABO

Donor ABO

	0	Α	В	AB
)	125/323	107/166	28/47	6/13
0	(39%)	(64%)	(60%)	(46%)
^	137/492	78/214	38/68	3/13
Α	(28%)	(36%)	(56%)	(23%)
ס	39/118	30/59	14/39	1/8
В	(33%)	(51%)	(36%)	(13%)
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AB	(21%)	(55%)	(29%)	(13%)



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#### **Compatible Pairs**



- -First compatible pair registered in June 2011
- -148 compatible pairs have now been registered in the scheme
- -100 (68%) appeared in only 1 matching run -Of those 55 (55%) were transplanted
- -In total, 71 patients have been transplanted through the scheme

### Non-proceeding transplants



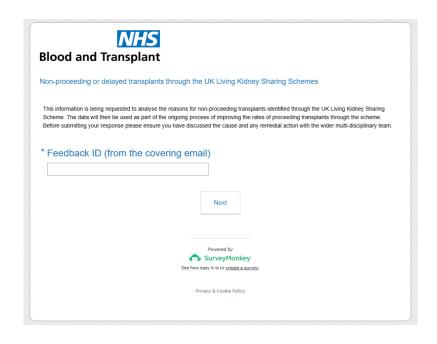
54% of identified transplants proceeded 2007-2011

66% proceeded 2012-present

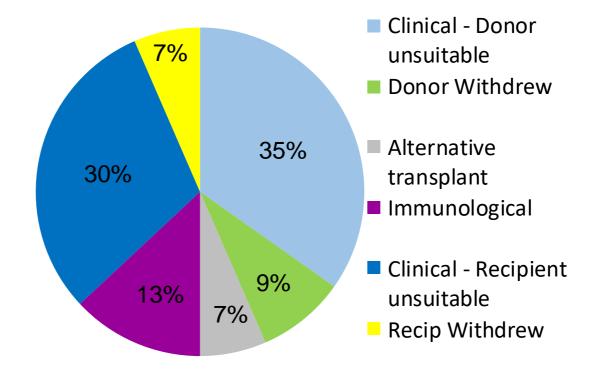
60% proceeded since January 2017

#### Non-proceeding transplants





#### October 2017- July 2018 (46 reasons)



### Non-simultaneous surgery



Introduced in 2015

• 50 non-simultaneous exchanges (133 transplants) to date

	2015	2016	2017	2018
Non- simultaneous exchanges (%)	13 (23%)	12 (22%)	13 (24%)	12 (17%)

#### **Altruistic donors in the UKLKSS**



Since January 2018, altruistic donors have been registered into the scheme by default

In 2018, we had 64 altruistic donor transplants, 23 fewer than in 2017

	2017	2018
Direct to list	61	33
Chain donation	26	31
Total chain transplants	64	79

 In 2018, 48% of transplants from altruistic donors were as part of a UKLKSS chain, an increase from 30% in 2017

# What information is available to support



UK Living Kidney Sharing Schemes Performance Figures

Patients Registered

Altruistic Donors in Paired Donation Matching Runs

Compatible Pairs Registered 135

271 (Apr 2018)

17 (Jan 2018)

82 (Apr 2018)

Paired Donation Transplants Identified

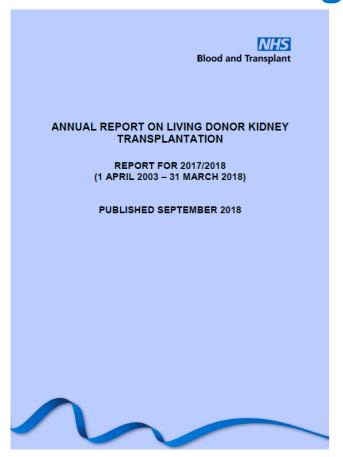
NHS

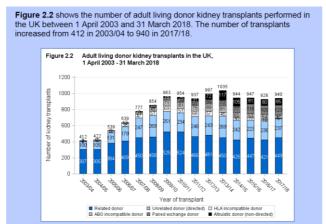
**Blood and Transplant** 

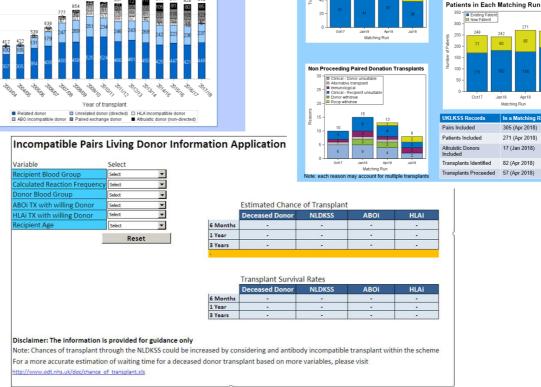
Paired Donation Transplants by Type

Altruistic Donor Transplants

decision making?







www.odt.nhs.uk/living-donation



# **Summary**

 There were 1010 living donor kidney transplants 2017/18, an increase from the previous financial year

 There has been an increase in the number of transplants through the UKLKSS and a decrease in antibody incompatible transplants

 Innovations in the UKLKSS are vital in making the most of every transplant opportunity