

Background

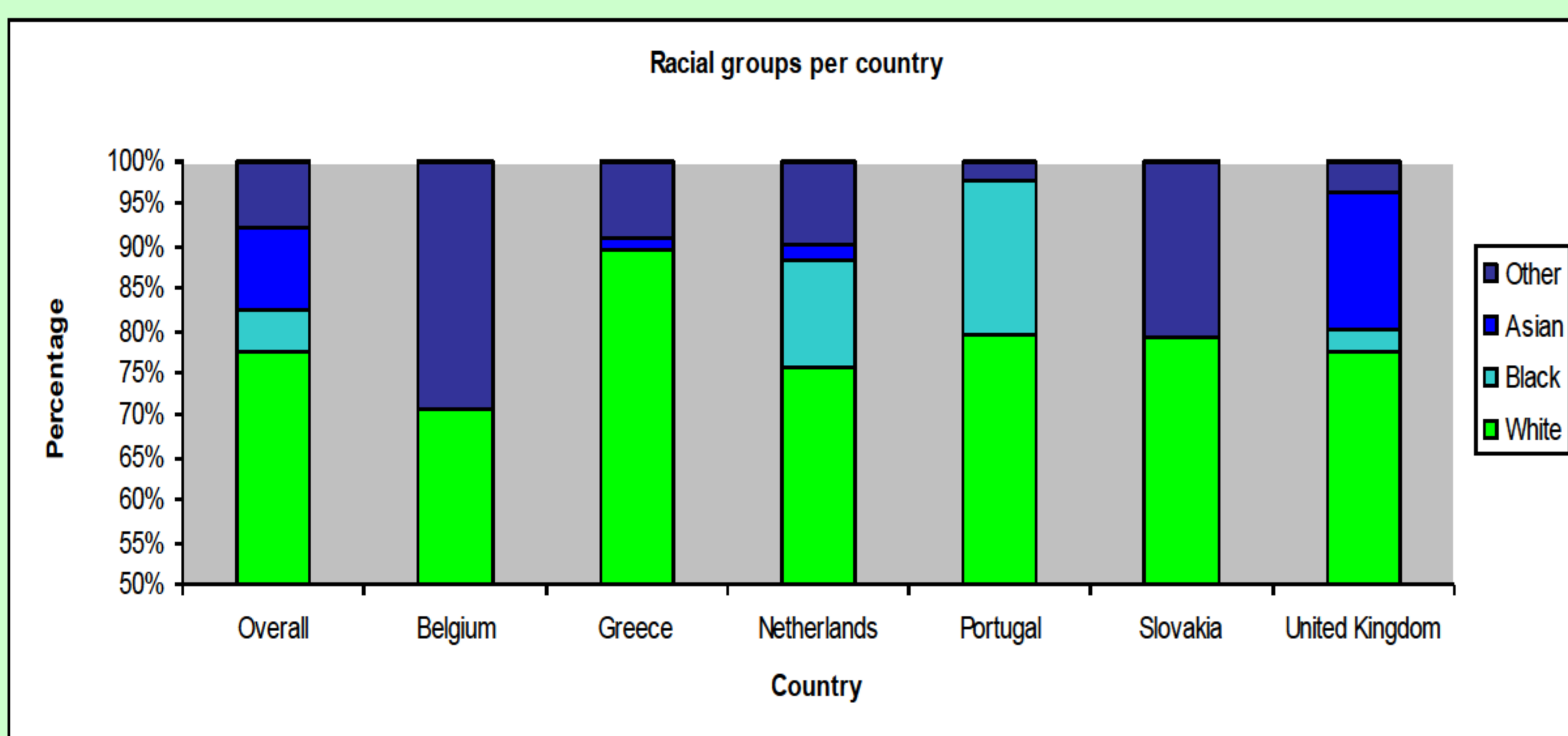
- Concern has arisen regarding racial disparities in the quality of care for children with end-stage renal disease.
- We aimed to assess differences in patient and treatment characteristics between racial groups among children on renal replacement therapy (RRT) in Europe.

Methods

- Patients from 6 European countries, aged <19 years.
- 4 ethnic groups: white, black, Asian and other (including all remaining racial groups).
- Patients prevalent on RRT on 31st December 2011 (N=1.096) were compared using analysis of variance (ANOVA) tests and Chi-squared tests.
- Kaplan-Meier and Cox regression were used to study access to kidney transplantation in incident patients on RRT between 2006-2011 (N=769).

Results

In prevalent patients (N=1.096) we found:



- Significantly more often pre-emptive transplantation in white patients (23.2%) than in all other groups (black 9.1 %, Asian 14.1%, other 14.0 %; $P=0.007$).
- Time on dialysis before transplantation tended to be longer in black, Asian and other racial groups (median 35.3, 30.5 and 26.5 months, respectively) than in white patients (21.4 months; $P=0.186$).
- A higher proportion of living kidney transplants in white (34.0%) versus black (14.3%), Asian (19.6%), and other (24.6%) patients ($P<0.001$).
- No significant differences between ethnic groups in clinical parameters, including haemoglobin, albumin, calcium, phosphate, body mass index and blood pressure.

Conclusion

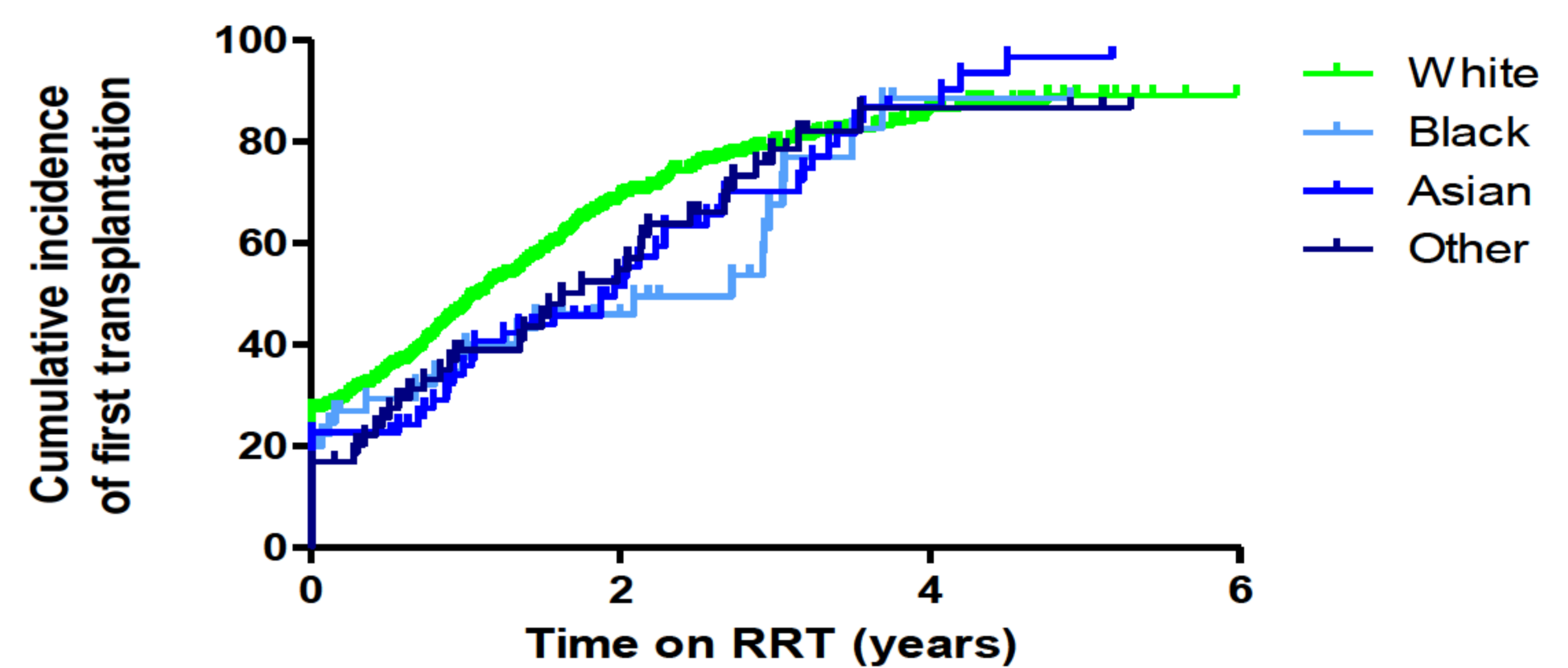
- White paediatric ESRD patients more often receive optimal treatment compared to other racial groups with respect to mode of RRT.
- Especially access to transplantation is hampered in non-white ESRD children as compared to white ESRD children in Europe.
- Further research is required to identify and address the contribution of medical and socio-cultural barriers to preferred treatment in these groups.
- WE WOULD LIKE TO THANK ALL FOR CONTRIBUTING TO THE ESPN/ERA-EDTA REGISTRY**

In incident patients (N=769) we found:

	White (N=599)	Black (N=45)	Asian (N=66)	Other (N=59)
Age at start RRT (years)¹	10.3 (0.0-18.5)	11.1 (0.0-18.1)	12.2 (0.0-18.6)	9.9 (0.0-18.6)
Gender (%male)	59.6	60.0	63.6	50.8
PRD (%)**				
CAKUT	46.1	26.7	33.3	49.2
Glomerulonephritis	11.0	33.3	19.7	10.2
Cystic Kidney Disease	9.7	2.2	13.6	6.8
Herededitary Nephropathy	8.3	4.4	7.6	6.8
Ischaemic Renal Failure	3.0	2.2	1.5	6.8
HUS	4.0	4.4	1.5	3.4
Metabolic disorder	3.0	0.0	4.5	3.4
Vasculitis	1.3	0.0	1.5	0.0
Miscellaneous	9.0	11.1	3.0	5.1
Unknown	4.5	15.6	13.6	8.5
RRT start (%)				
Dialysis	72.8	80.0	77.3	83.1
Transplantation	27.2	20.0	22.7	16.9
TX source (%)**				
Deceased donor	37.6	64.3	68.6	63.4
Living donor	34.9	17.9	21.6	17.1
Source unknown	27.5	17.9	9.8	19.5

* $P<0.05$ ** $P<0.01$ ¹data are presented as median (range); RRT: renal replacement therapy PRD: primary renal disease TX: renal transplantation

Access to transplantation in different ethnic groups



	HR (access to TX) unadjusted	P value	HR (access to TX) adjusted*	P value
White	Reference group		Reference group	
Black	0.75 (0.51-1.1)	0.139	0.65 (0.44-0.95)	0.030
Asian	0.84 (0.63-1.13)	0.248	0.66 (0.49-0.89)	0.007
Other	0.83 (0.60-1.14)	0.259	0.94 (0.68-1.30)	0.709

* Adjusted for age at start, country, sex; HR: Hazard ratio TX: transplantation