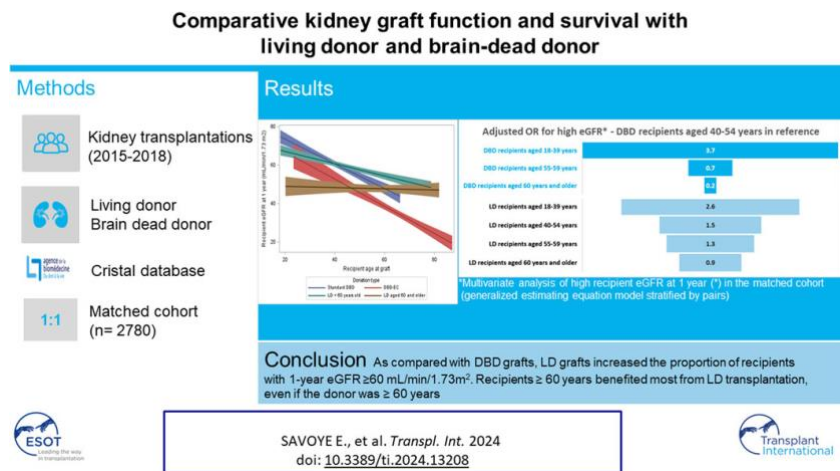


Journal Club – 18 November 2024

Comparison of Kidney Graft Function and Survival in an Emulated Trial with Living Donors and Brain-Dead Donors

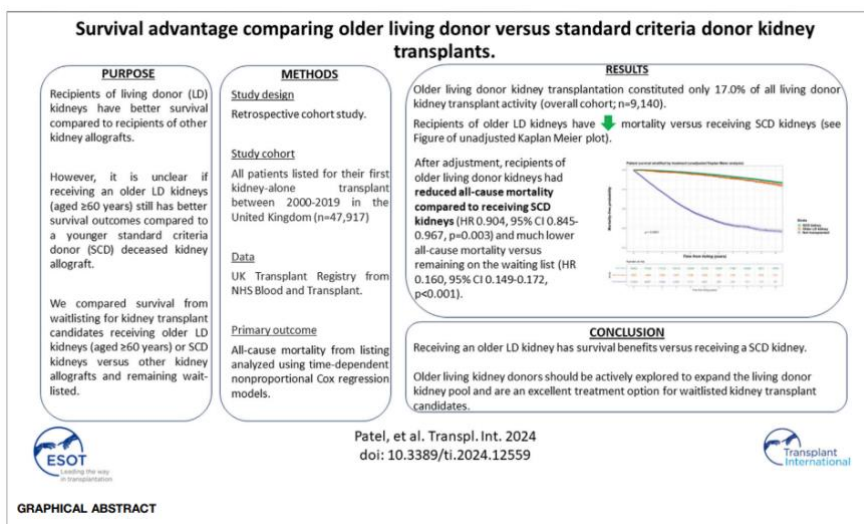
With Emilie Savoye and Myriam Pastural, Ilkka Helanterä and David Paredes as panellists, and Christophe Masset as moderator.

Do not miss the next Journal Club featuring Emilie Savoye and Myriam Pastural on their recent work on living donation in the elderly <https://doi.org/10.3389/ti.2024.13208>.

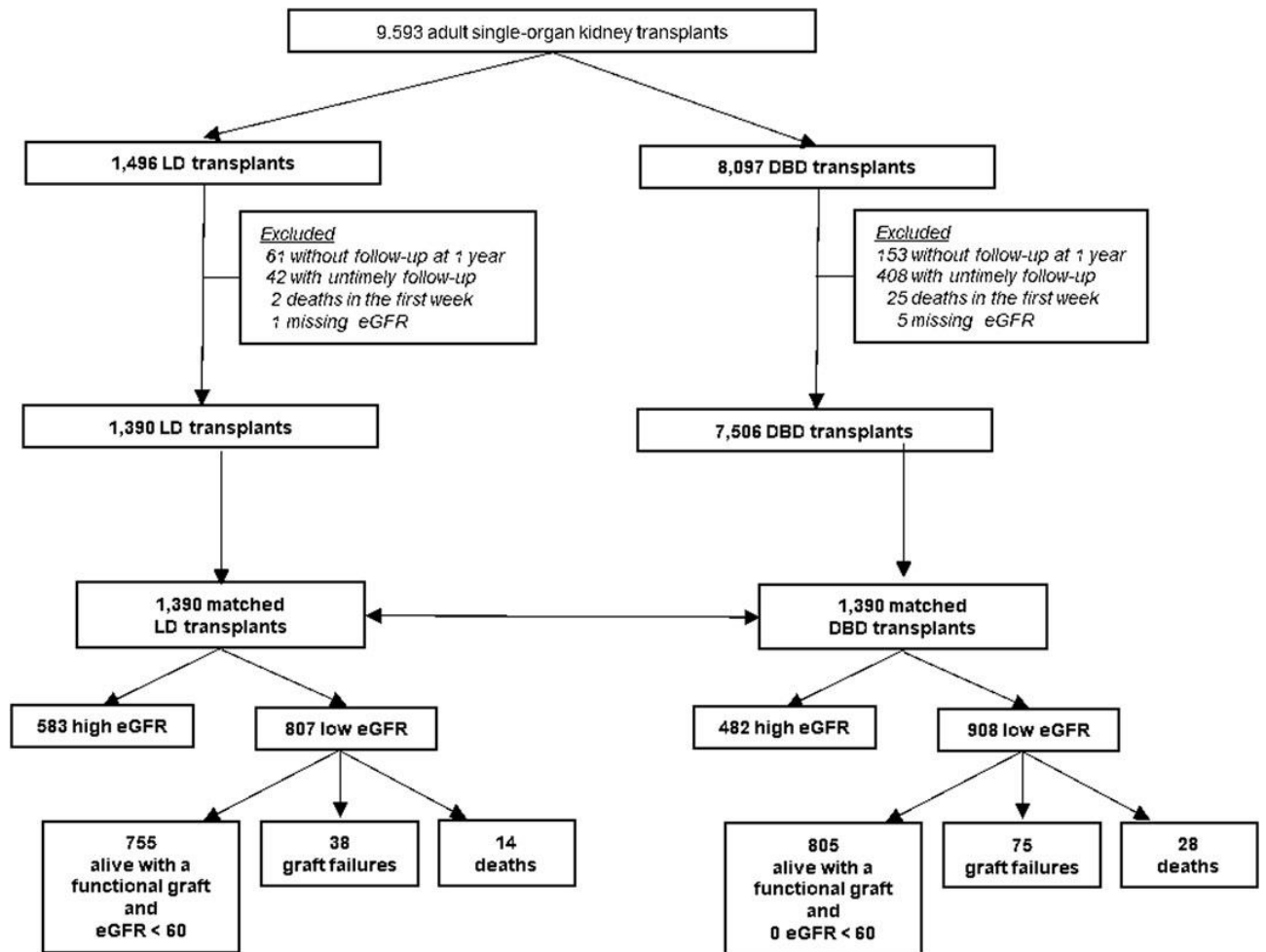


Context:

UK registry recently reported that old recipients of living donors have a survival benefit compared to recipients of SCD (doi: 10.3389/ti.2024.12559), but what about allograft function and survival?

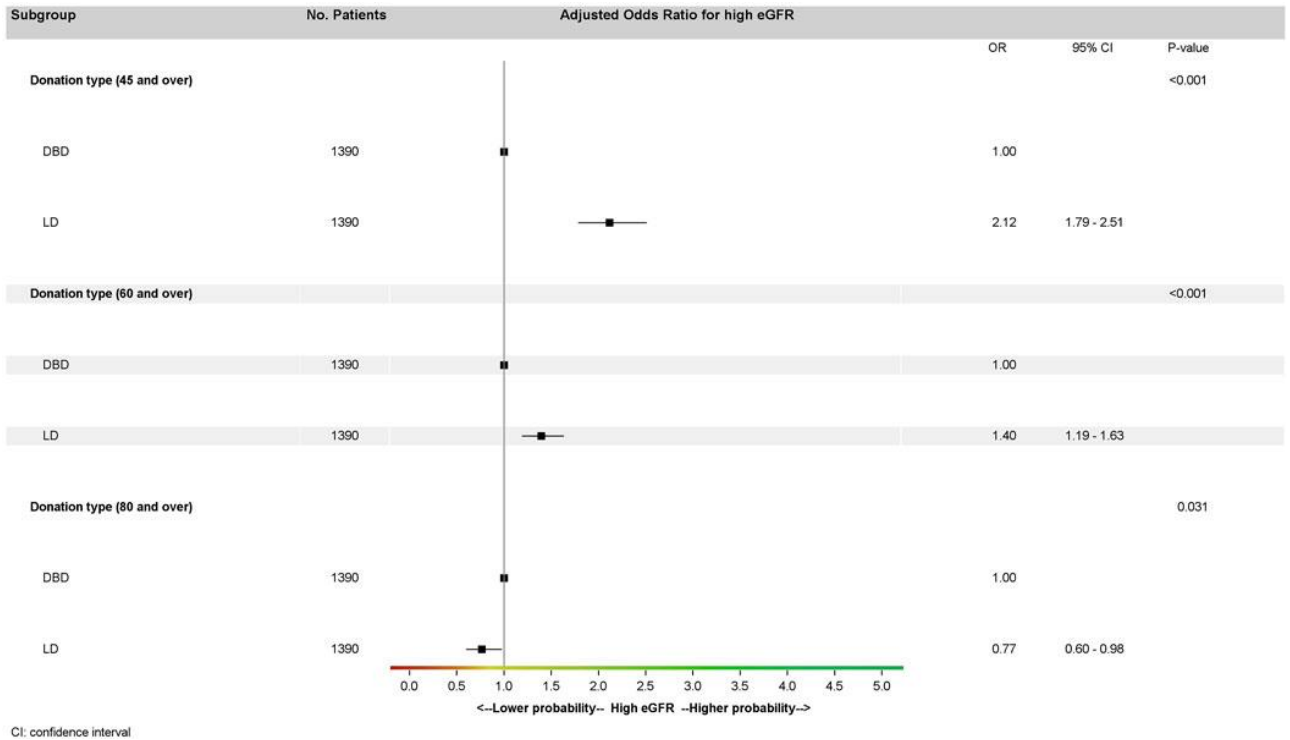


Savoie et al. conducted a registry analysis on French kidney transplant recipients between 2015 and 2018. ABO and HLA incompatible transplantation were excluded.



They built an emulated target trial using a propensity score to match a group of recipients with the same probability of receiving a kidney from LD and DBD at the time of transplantation

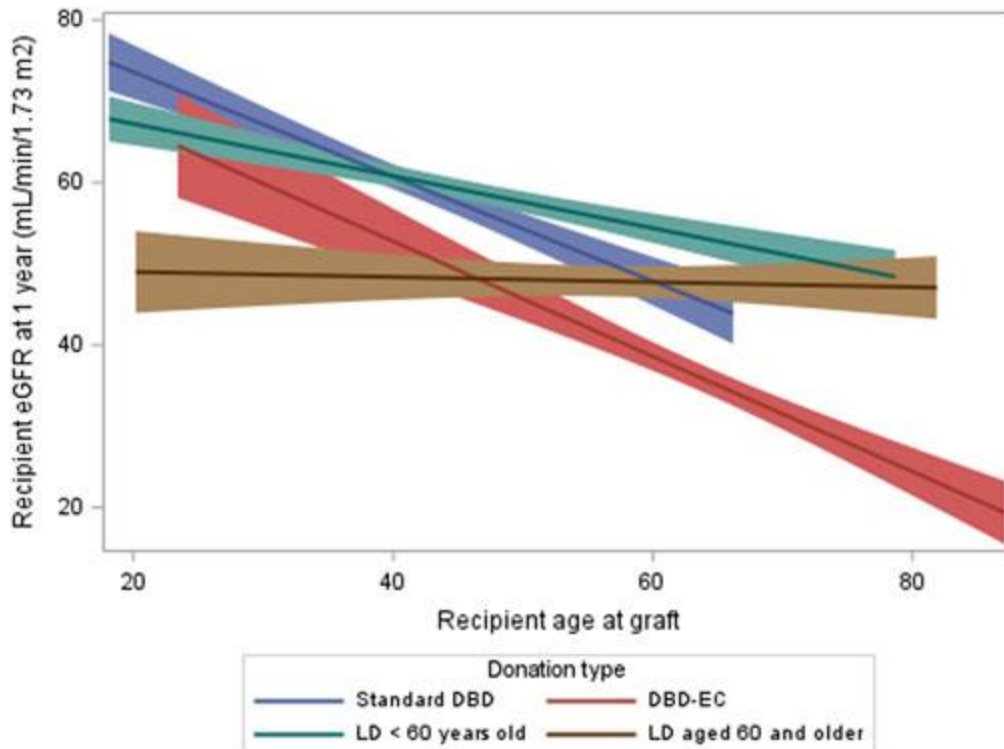
The main outcome was the incidence of recipients with eGFR ≥ 60 ml/min at one year. Secondary outcomes were allograft survival at 4 years and patient survival



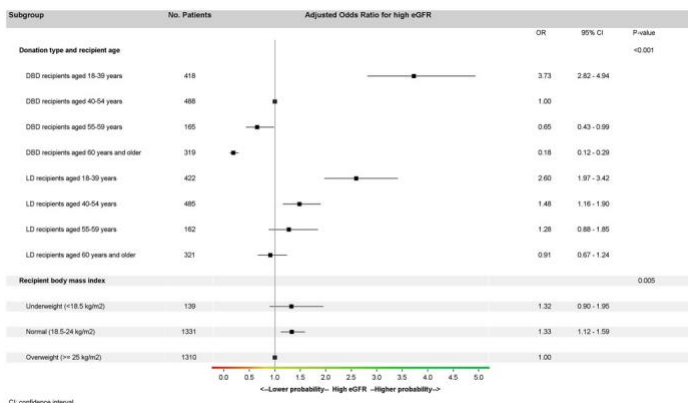
After the matching procedure, 1,390 LD and DBD paired transplantations were analysed. There were no differences in the recipient's characteristics. DBD donors were younger than LD donors for recipients aged 18–39 years, whereas LD donors were younger than DBD donors for recipients aged ≥ 60 years

Table with columns: Variable, DBD (n=1390), LD (n=1390), P-value. The table lists various recipient and donor characteristics such as age, sex, BMI, and clinical parameters. The table is mostly illegible due to its small size and high resolution.

Mean one-year eGFR, in recipients ≥ 60 years, had a better allograft function when receiving an allograft from a LD (both with young and old LD) than from a DBD

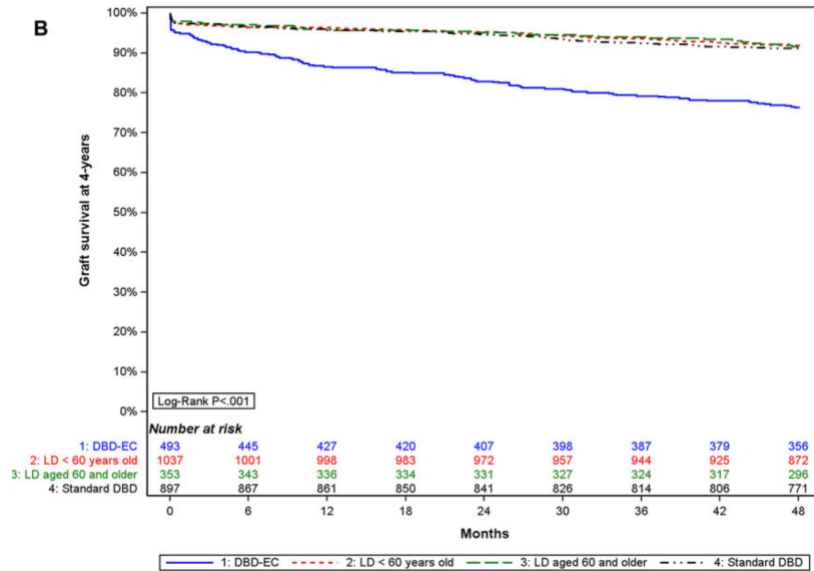


In multivariate analysis, LD recipients aged 40–54 years had a significantly higher probability of having an eGFR ≥ 60 mL/min compared to same-aged DBD recipients.

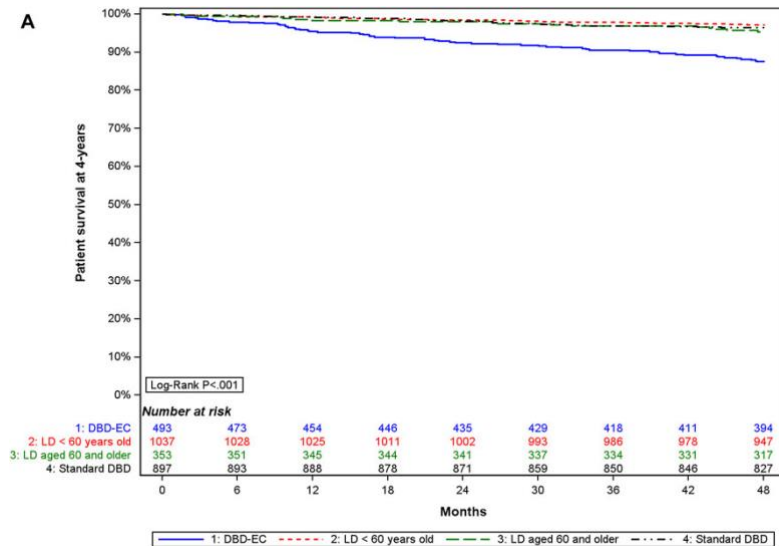


eGFR was higher for recipients aged under 40, whatever the type of donor, and from the age of 55 eGFR was higher for LD than for DBD recipients

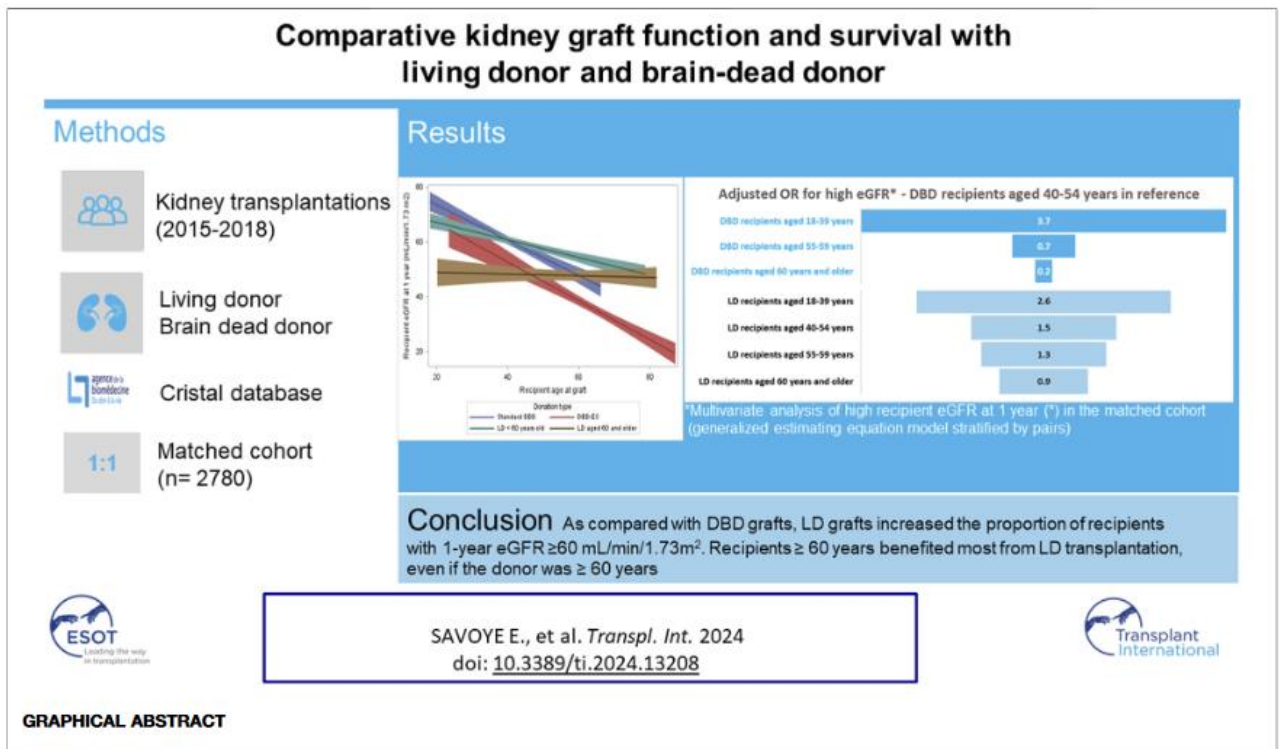
Graft survival at 4 years was the lowest with DBD-EC transplants versus DBD-SC transplants. The highest was for LD<60y <https://doi.org/10.3389/ti.2024.13208>



Similar results were found for patient survival



This study shows that older recipients derive significant benefits from LD, which emphasises the importance of evaluating living donors ≥ 60 years old! Paired exchange programs offer a viable avenue to explore improved age matching, particularly with a significant age gap between the donor and recipient!



Registration link:

https://go.esot.org/ti_jc_18nov2024

