

Results for sensitivity analyses for the effect of transplantation at different times after first graft loss provided a similar, positive assessment regarding robustness and led to the same conclusions as the main analysis (results not shown for brevity).

Supplemental Table 1: Summary of results for effect of second transplantation for all sensitivity analyses. CI denotes confidence interval.

Analysis	Hazard ratio (95% CI)	Difference in restricted mean survival time In months (95% CI)	
		At 5 years	At 10 years
Main	0.73 (0.53 to 0.95)	1.6 (0.3 to 2.9)	5.8 (0.9 to 11.1)
Only complete waitlistdata ¹⁾	0.56 (0.43 to 0.76)	2.7 (1.4 to 3.9)	10.5 (5.1 to 15.5)
Stratified by treatment strategy ²⁾	-	1.6 (0.1 to 3.1)	8.2 (3.4 to 12.6)
Alternative IPCW (Aalen)	0.74 (0.57 to 1.01)	1.5 (-0.1 to 2.7)	5.4 (-0.2 to 10.1)
Including PRA ³⁾	0.58 (0.38 to 0.91)	2.3 (0.5 to 3.7)	9.2 (1.8 to 15.5)
Excluding live donor transplantations ⁴⁾	0.81 (0.60 to 1.08)	1.1 (-0.4 to 2.5)	3.9 (-1.4 to 9.3)
Excluding data prior to 1994 ⁵⁾	0.47 (0.35 to 0.64)	3.8 (2.3 to 4.9)	14.5 (8.7 to 19.7)
Alternative censoring horizon ⁶⁾	0.61 (0.47 to 0.83)	2.3 (0.9 to 3.4)	-

1) Excluding 265 (8.9% of whole dataset) individuals without complete waitlist data.

2) No hazard ratio estimate available due to stratification.

3) Excluding 407 (17.5% of whole dataset) individuals without information on PRA.

4) Excluding 115 (5% of whole dataset) individuals with organ from live donor

5) Including 984 auxiliary trials (66% of analysis) and 1836 individuals (78% of whole dataset)

6) Due to the administrative censoring horizon at 10 years, results for RMST at 10 years are not available.