

## Deceased Donor Waitlist in the Malaysian Kidney Allocation System (MyKAS): Reasons for disqualification.

Yee, SY, Yahya R  
*Hospital Kuala Lumpur*

### Introduction

The deceased donor kidney allocation system in Malaysia includes all prevalent dialysis patients age < 60 and rank by dialysis vintage. In 2020, the expected post-transplant survival (EPTS) score of > 40 was utilized to exclude patients for deceased donor kidney transplantation (DDKT).

Eligible ESKD patients will be counseled, consented and evaluated for medical and surgical suitability for DDKT. Those with Panel Reactive Antibody (PRA) of either Class I or Class II HLA antibodies of > 20% will be temporarily excluded from the waitlist. Once their PRA falls below 20% or their medical or surgical issues were addressed, patients can be placed back onto the waitlist.

### Objective

This analysis reports the number of patients who were removed from the waitlist (either temporarily or permanently) and the reasons for it.

### Methods

All patients who were evaluated for suitability of DDKT were included. Data was extracted from the electronic National Renal Registry (eNRR) from 11<sup>th</sup> March 2020 till 31st December 2022. The reasons for removal from the waitlist were analysed.

### Results

A total of 1255 ESKD patients were evaluated during this period and 899 (71.6%) were considered unsuitable for DDKT. One wrong entry was excluded from analysis. Of 1254 patients, only 236 (18.8%) were successfully placed on the active waitlist for DDKT. The mean age for children and adult were  $14.6 \pm 2.7$  and  $34.7 \pm 6.2$  respectively. Approximately 12% of these ESKD patients died on the waitlist and 1% were lost to follow-up. The dialysis vintage was  $4.8 \pm 3.0$  years and  $14.3 \pm 3.9$  years for children and adult population.

The reasons for disqualifications were "Medical" (51.4%), followed by 17.6% due to PRA >20%, and 9.4% "Surgical". A significant proportion (21.5%) refused DDKT, especially those with higher EPTS score. "Cardiovascular"(19.2%) and "Bone Disease"(22.2%) were the most common "Medical" reasons while "Cysts" was the predominantly the "Surgical" reason. "Unsuitable vessels" was significantly higher amongst those with EPTS 20-40.

### Conclusions

Passive listing of DDKT and ranking by dialysis vintage was not resource-effective due to high proportion of unsuitable patients for transplantation due to various long-term complications of dialysis. Active listing of suitable patients may be a better option.

**Table 1: Reasons of removal from DDKT Waitlist**

Reason	EPTS Group		Total (%), n=799
	0 – 20 (%)	20 – 40 (%)	
Refused transplant	18.3	28.0	21.5
High PRA	19.5	18.4	17.6
Medical	52.2	45.1	51.4
Surgical	10.0	8.5	9.4

**Table 2: Medical reasons for removal from DDKT Waitlist**

Reason	EPTS Group		Total (%), n=343
	0 – 20 (%)	20 – 40 (%)	
Logistic/Social	9.1	4.8	7.0
Cardiovascular	14.3	24.4	19.2
Renal bone disease	22.3	22.0	22.2
Chronic liver disease	2.3	2.4	2.3
Cancer	6.3	3.0	4.7
Non-adherence	13.7	11.3	12.5
Active infection	5.1	6.0	5.5
Smoker/Obese	10.3	9.5	9.9
Others	16.6	16.7	16.6

**Table 3: Surgical reasons for removal from DDKT Waitlist**

Reason	EPTS Group		Total (%), n=63
	0 – 20 (%)	20 – 40 (%)	
Urological	34.4	22.6	28.6
Unsuitable vessels	18.8	35.5	27.0
Cysts	46.9	41.9	44.4