

Belatacept Discontinuation in Stable Recipients of Elevated Risk Kidney Transplants

BACKGROUND

Belatacept is a fusion protein that selectively inhibits T-cell activation through stimulation blockade.

It is regularly used at our institution for elevated risk kidney transplant recipients.

The purpose of this study is to examine the reasons for Belatacept discontinuation and short-term consequences

METHODS

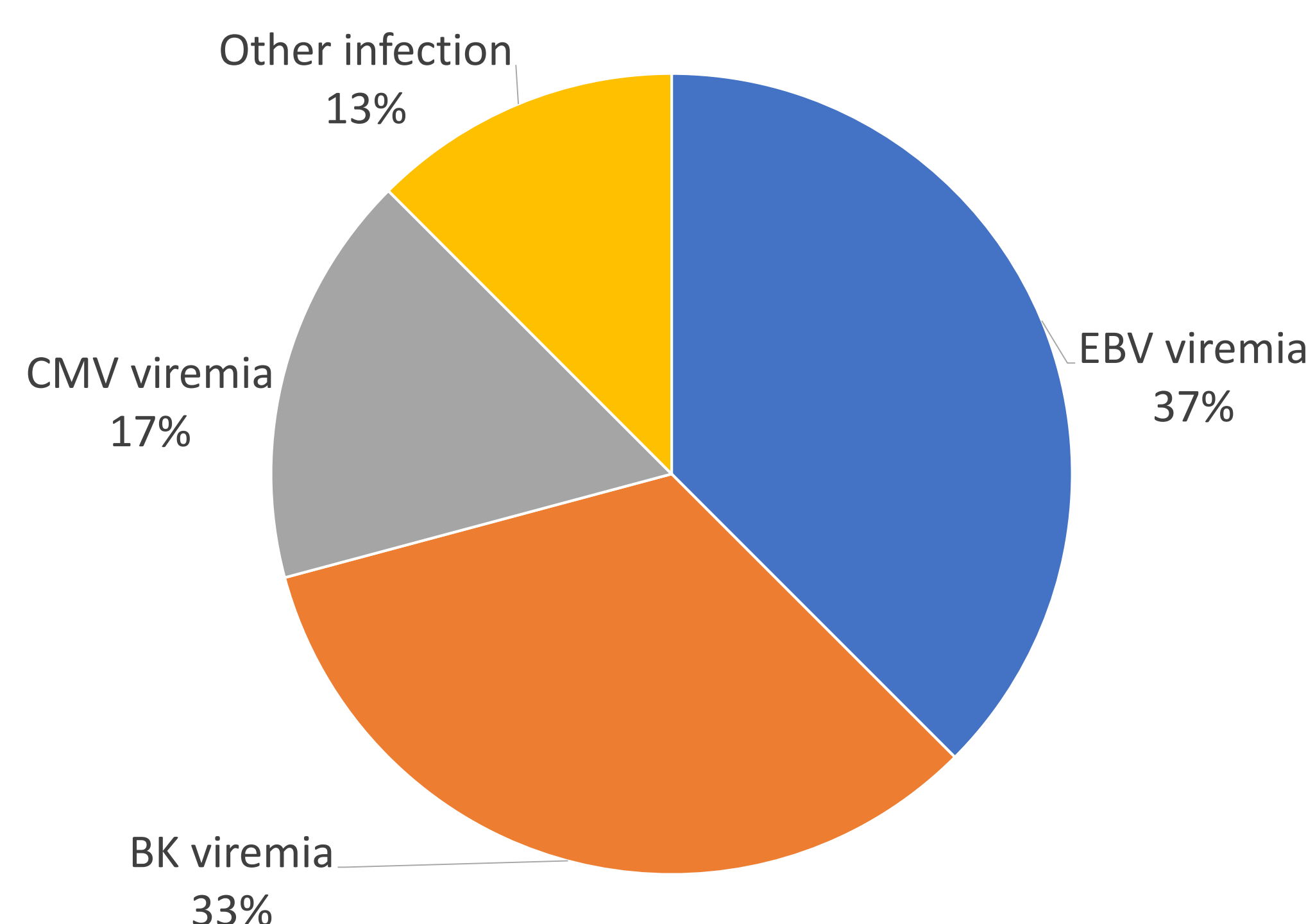
This was a retrospective study of all kidney transplants at a single institution from July 1, 2020 to Dec 31, 2022.

Kidneys were considered high risk if they were from high KDPI donors, dual kidney transplants, or kidneys with long cold or warm ischemic times. Recipients were considered high risk if they had pre-existing donor specific antibodies or were highly sensitized. These patients were placed on the Belatacept based regimen and all other kidney transplant patients were placed on the Standard regimen.

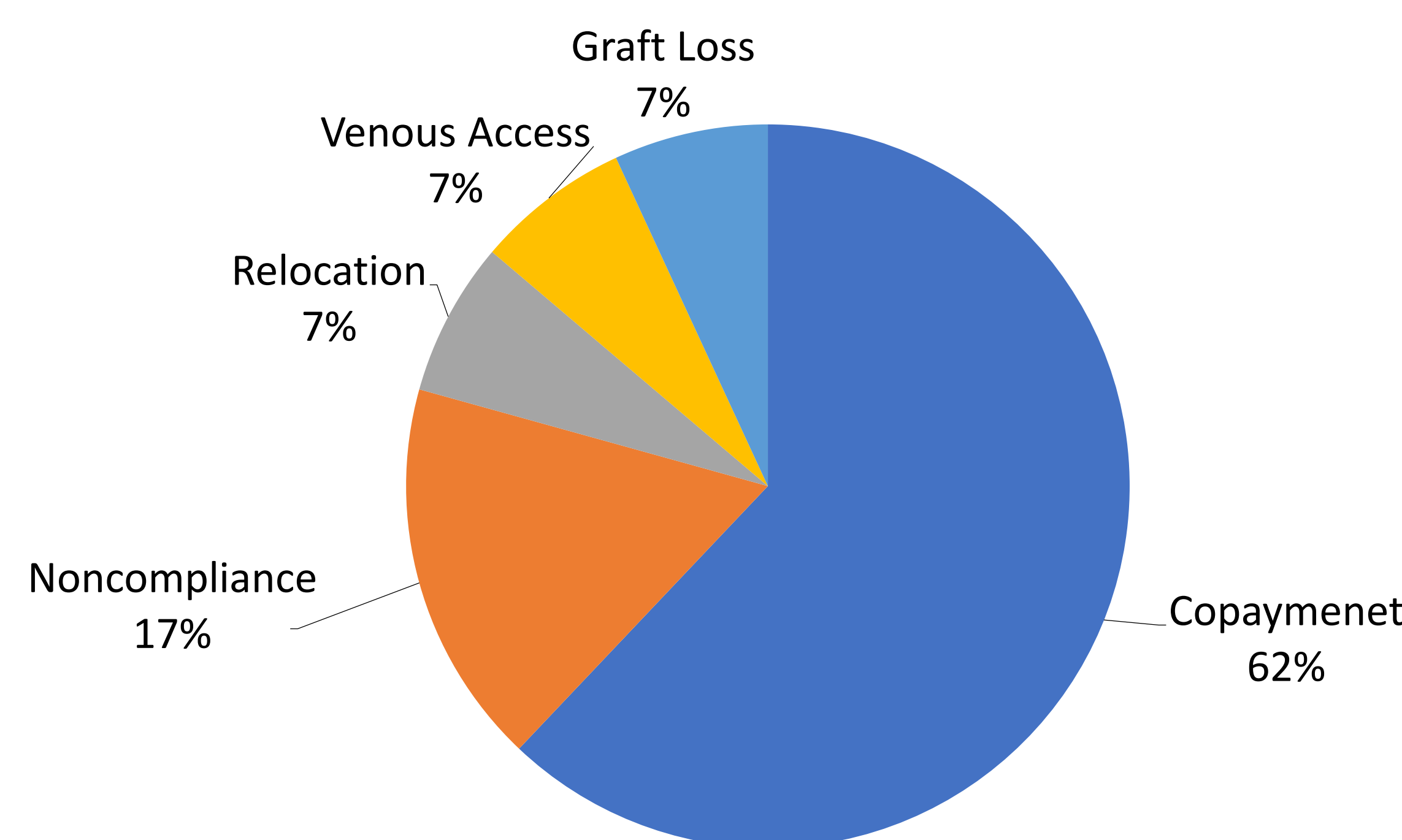
We evaluated patients who underwent Belatacept cessation within the first year after transplant.

Patient demographics, immunosuppressant protocol, reasons for discontinuation, and outcomes (3 months, 1 year) post transplant were all reviewed.

Infectious Causes of Discontinuation



Logistical Causes of Discontinuation



	Group A	Group B	Group C	Belatacept based regimen
n	109	56	82	Belatacept 5mg/kg every 28 days Tacrolimus goal 4-6 ng/ml Mycophenolate Mofetil 500mg BID Prednisone taper to 5mg daily
Creatinine mg/dl(3month)	1.4±0.56	1.55±0.72	1.41±0.98	Standard regimen Tacrolimus goal 8-10 ng/ml, 6-8 after 3 months Mycophenolate Mofetil 1000mg BID Prednisone taper to 5mg daily
Creatinine mg/dl (12 month)	1.4±0.31	1.50±0.59	1.32±0.90	
GFR (3 month)	50.76±12.21	47.48±12.11	51.38±10.67	
GFR (12 month)	51.79±6.72	49.23±10.70	53.90±8.56	
p-value	0.61	0.47	<0.05	

RESULTS

53 patients had a reason for discontinuation noted; the most common causes were broken down into 2 major categories: Infectious Causes and Logistical Causes.

A total of 18 patients (62% of the Logistical causes group) were discontinued from the Belatacept regimen due to high copayments. Nine patients (37% of the Infectious causes group) were discontinued due to EBV, followed by other viremias that were difficult to treat.

In the more marginal group of kidneys, there was no significant improvement in Scr over time, irrespective of Belatacept cessation or continuation.

CONCLUSIONS

Belatacept cessation was necessary in almost 34% of kidney transplants. The most common cause of discontinuation was lack of affordability of the required co-payments and viremias. Kidney function does not appear to be adversely impacted at one year after kidney transplant despite discontinuation of Belatacept and returning to the standard regimen.

REFERENCES

Jared Splinter, PharmDa; Mary Froehlich, MD; Sunil Patel, MD; Parminder Kaur, PharmD Candidate, Jennifer Delgado-Saldana RN, Michael Angelo Jaleco RN: UMC Center For Transplantation, Kirk Kerkorian School of Medicine at UNLV

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