



São Paulo - Brazil

Is a complete viral load suppression required to reduce the risk of cytomegalovirus recurrence in kidney transplant recipients using the preemptive strategy?

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PURPOSE

To evaluate the impact of two viral load (VL) thresholds for withdrawing antiviral treatment on the cytomegalovirus (CMV) recurrence in kidney transplant recipients (KTRs) following a preemptive strategy.

METHODS

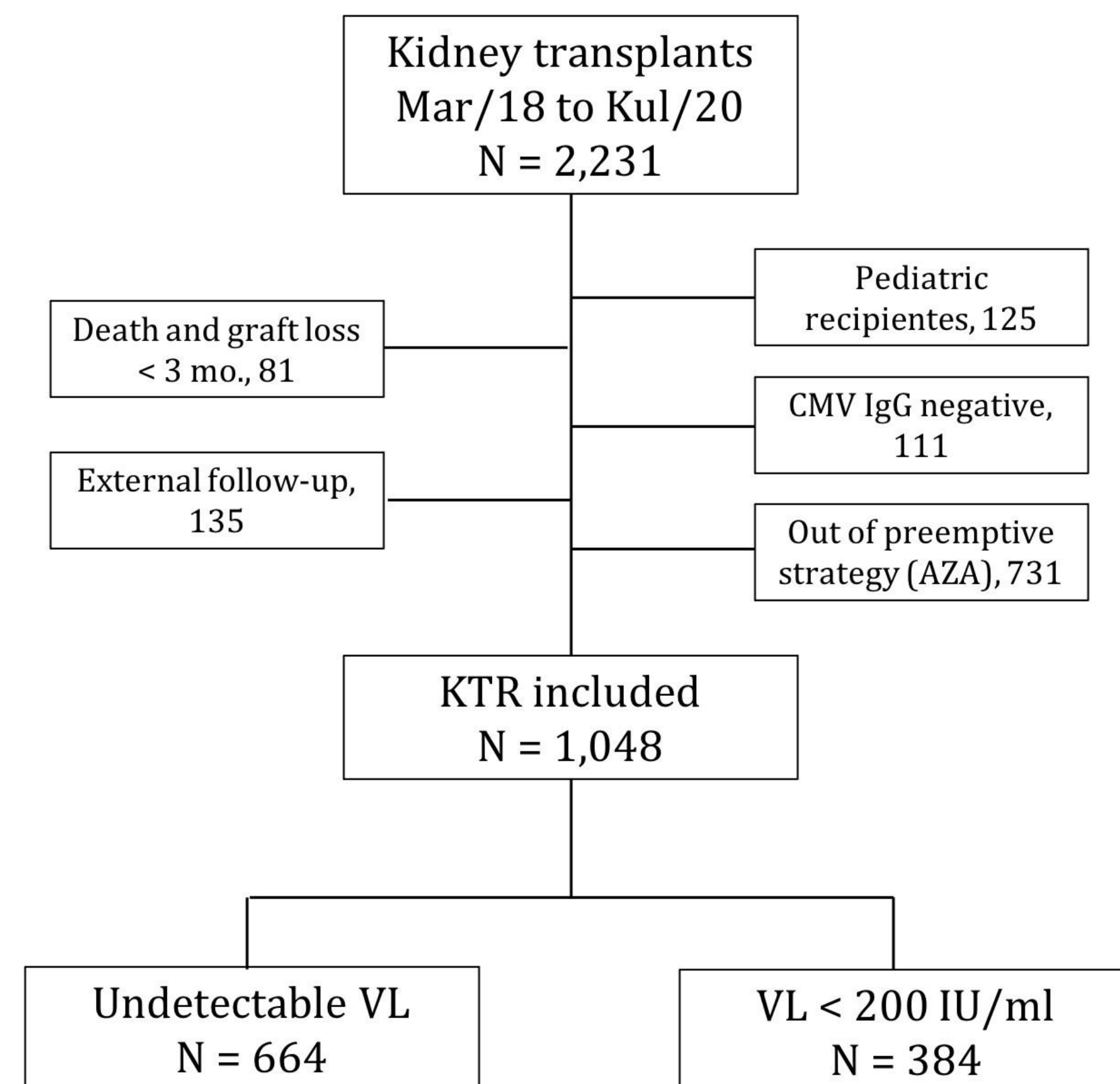
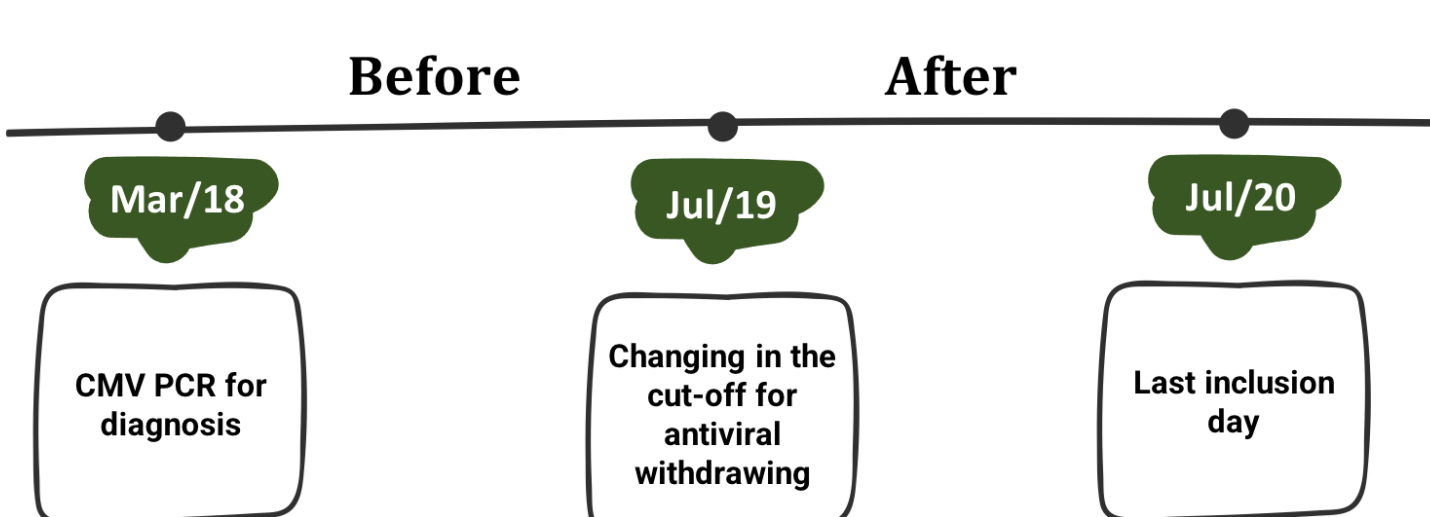
Single-center cohort study at Hospital do Rim (São Paulo -Brazil)
Quasi-experiment before-and-after



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1. CMV viremia monitored weekly for three months post- transplant;
2. Antiviral treatment initiated upon asymptomatic viremia exceeding 5,000 IU/mL or symptomatic CMV;
3. Follow-up: 1-yr post-transplant.



Outcome

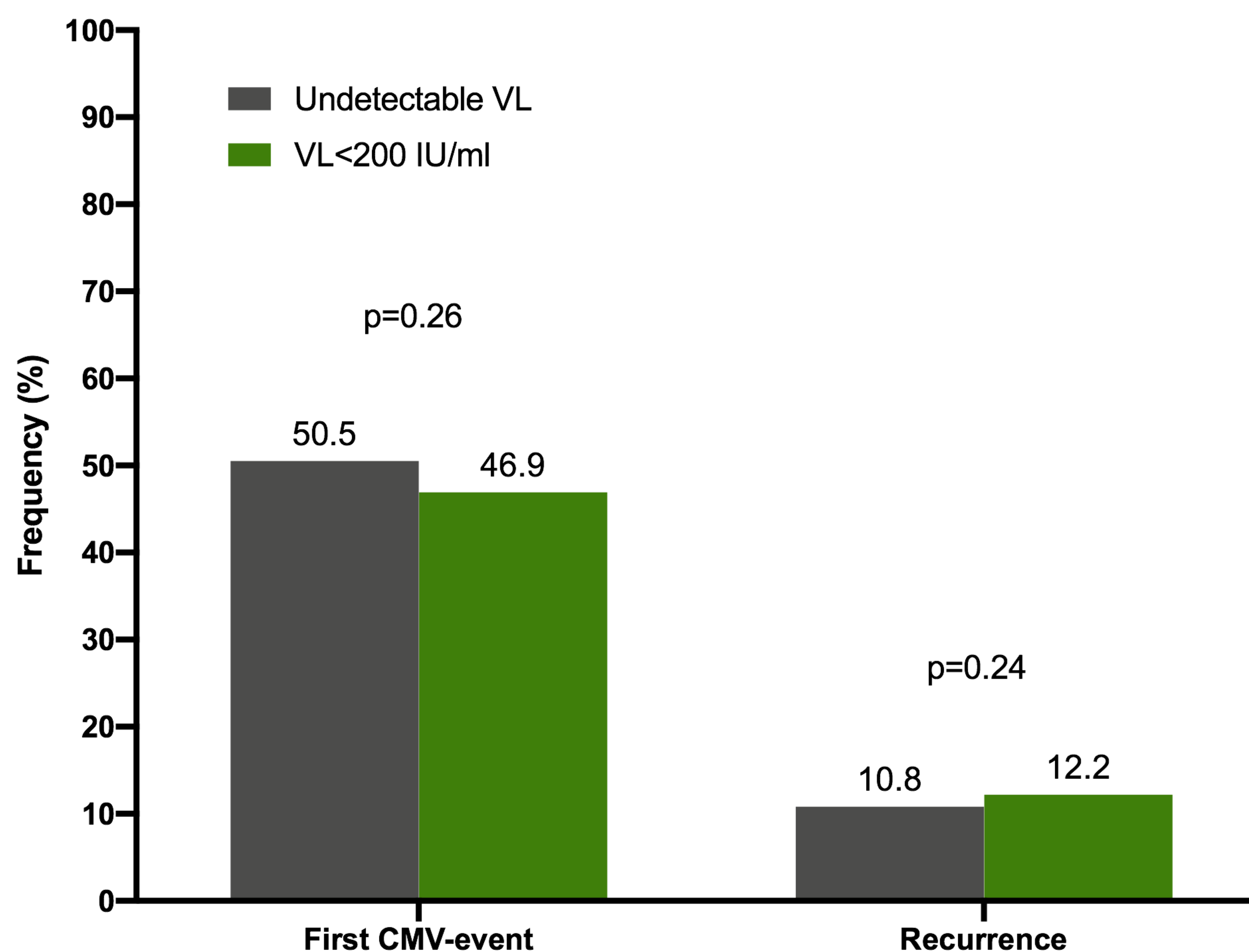
CMV recurrence at preemptive strategy

RESULTS

All patients received a single 3.0 mg/kg dose of rATG for induction and were maintained on a regimen of tacrolimus (99.5%), prednisone (100%), and mycophenolate (100%)

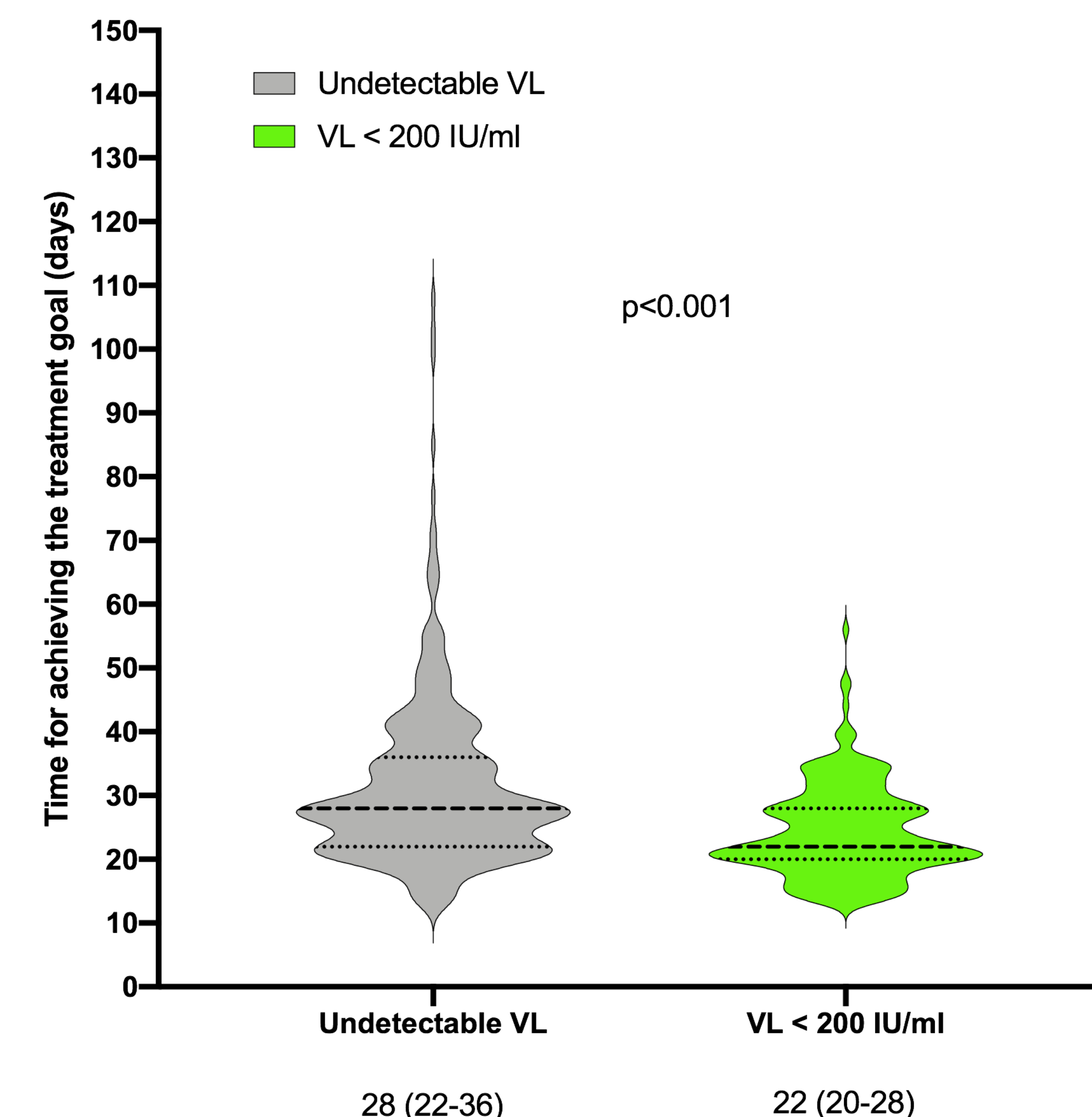
Variables	Undetectable VL (N= 664)	VL < 200 IU/ml (N=384)	p
Recipient age, years	48	40	0.072
Recipient ethnicity (White), %	55.7	41.9	<0.001
Donor age, years	52	54	0.003
Deceased donor, %	90.2	94.3	0.022
Cerebrovascular brain death , %	68.1	71.3	0.013
Hypertension - donors, %	40.7	50.8	0.001
KDPI, median of %	76	80	0.062

Primary Outcome



	Undetectable VL (N= 664)	VL < 200 IU/ml (N=384)	p
Time between transplant and 1 st CMV-event	27 days	23 days	<0.001
Time between 1 st CMV-event and recurrence	44 days	37 days	0.08

Time for achieving the preemptive treatment goal



CONCLUSIONS

Adjusting preemptive strategy thresholds to allow a low but detectable VL for withdrawing the antiviral therapy significantly shortened treatment duration without increasing CMV recurrence risk, thereby offering a potentially optimized approach for managing CMV in KTRs .