L04 - Immunosuppressive agents

**4CPS-148** 

# ANALYSIS OF INTRA-PATIENT VARIABILITY OF PLASMATIC LEVELS OF TACROLIMUS IN EARLY MAINTENANCE OF RENAL POST-TRANSPLANT

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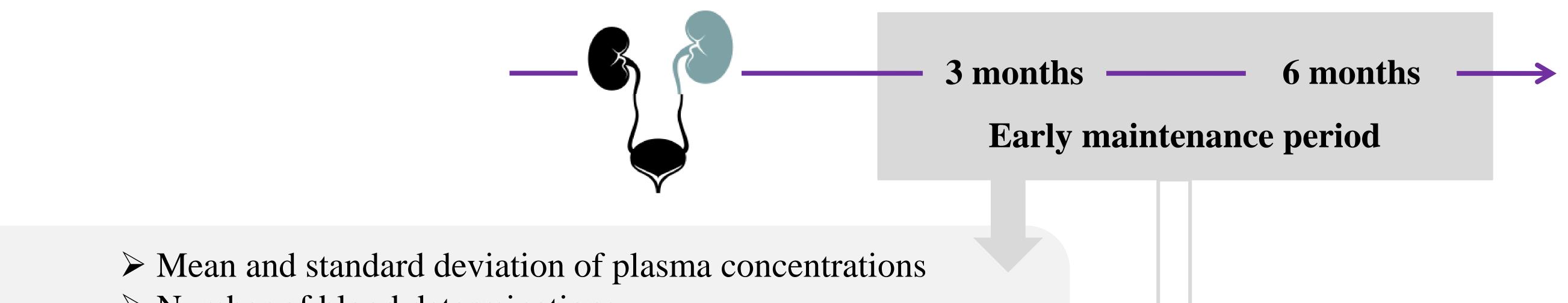


Tacrolimus is a calcineurinic inhibitor characterized by narrow therapeutic window and high variability of plasmatic levels. To assess the intra-patient variability of tacrolimus plasmatic levels in kidney transplanted patients during the early maintenance period, 3-6 months after surgery. In the early maintenance period begins a progressive reduction of immunization to establish the future immunosuppressant dosage.

### **Material and Methods**

**Observational retrospective study**: January 2015- January 2017

Kidney transplanted patients > 18 years old



### Analized variables

#### Number of blood determinations

- Coefficient of variation
- Proportion of values lower than 5 and 7 ng/ml (P5 and P7)
- > Area under the concentration-estimated time

\* To describe the intra-patient variability was used the coefficient of variation

### Results

plasmatic levels values is establishedbetween 5-20 ng/mlTherapeuticcontrolisconsidered

of therapeutic

Range

inadequate if intra-patient variability is superior to 30 % or the P7 or P5 is superior to 20 %.

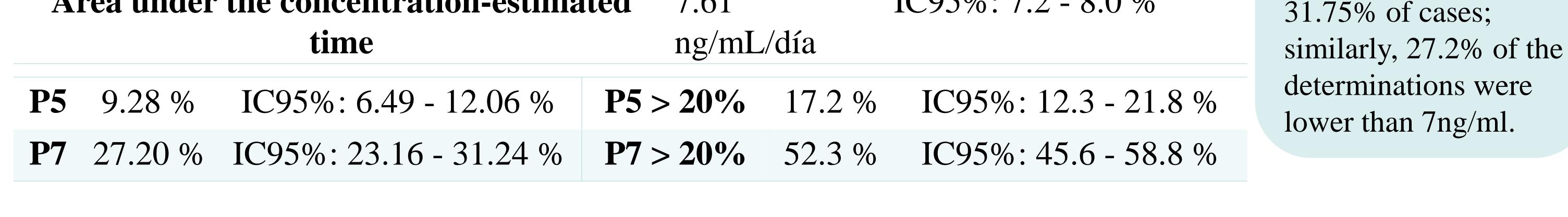


211 patients and 996 tacrolimus blood determinations

Mean tacrolimus plasmatic levels	8.57 ng/ml	IC95%: 8.26 - 8.88	]
Mean blood determinations	4.72	IC95%: 4.17 - 5.26	V r
<b>Coefficient of variation</b>	25.41 %	IC95%: 23.09 - 27.74 %	r t
<b>Coefficient of variation &gt; 30%</b>	31.75 %	IC95%: 25.42 - 38.09 %	ľ
Area under the concentration-estimated	7.61	IC95%: 7.2 - 8.0 %	r

The intra-patient variability of tacrolimus plasmatic levels during the early maintenance period was higher than recommended in

tacrolimus



## Conclusion

The early detection of patients with high intra-patient variability, or analytical values lower than 7 ng/ml in the early maintenance period is essential, since these are associated in the long term with a worse prognosis, leading to chronic rejection of the graft and/or greater pharmacological toxicity.

