Determinants of immunosuppressive therapy in renal transplant recipients: an Italian observational study (the CESIT project)

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ABSTRACT

BACKGROUND
Very scanty evidence is available on factors influencing the choice of immunosuppressive drug therapy after kidney transplantation.

METHODS
An Italian multiregional real-world study was conducted integrating national transplant information system and claims data. All patients undergoing kidney transplantation for the first time during 2009–2019 (incident patients) were considered. Multilevel logistic models were used to estimate Odds Ratio (OR) and corresponding 95% Confidence intervals. Factors with statistically significance were identified as characteristics associated with treatment regimens: cyclosporin-CsA vs tacrolimus-Tac and, within the latter group, mTOR inhibitors vs mycophenolate-MMF.

RESULTS
We identified 3,622 kidney patients undergoing transplantation in 17 hospitals located in 4 Italian regions, 78.3% was treated with TAC-based therapy, of which 78% and 22% in combination with MMF and mTOR, respectively. For both comparison groups, the choice of immunosuppressive regimens was mostly guided by standard hospital practices. Only few recipient and donor characteristics were found associated with specific regimen (donor/receipt age, immunological risk and diabetes).

CONCLUSIONS
The choice of post-renal transplant immunosuppressive therapy seems to be mostly driven by standard Centre practices, while only partially based on patient's characteristics and recognized international guidelines.

FULL TEXT
https://bmcnephrol.biomedcentral.com/articles/10.1186/s12882-023-03325-9