

# A candidate gene approach of the calcineurin pathway to identify variants associated with clinical outcomes in renal transplantation

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© 2016 Future Medicine Ltd. Aim: To investigate the potential influence of variants in genes involved in the calcineurin pathway on the efficacy and toxicity of calcineurin inhibitors in renal transplantation. Materials & methods: Twenty-three polymorphisms in thirteen genes were tested in 381 renal transplant recipients receiving ciclosporin (n = 221) or tacrolimus (n = 160) and mycophenolate mofetil. Data were collected prospectively over the first year post-transplantation. Results: Multivariate survival analyses revealed no genetic associations with biopsy proven acute graft rejection and serious infections. Donor-recipient Cytomegalovirus mismatch was the only variable associated with serious infection. Conclusion: This large exploratory study casts doubts on the potential interest of genetic biomarkers related to CNI pharmacodynamics but associations with

other phenotypes in transplantation deserve further studies.