INTRODUCTION AND AIMS: Immunosuppression therapy is essential to avoid rejection after kidney transplantation. The chronic use of this drugs increases the risk of malignancy compared to general population. Oncology complications are a main cause of recipient death. The increase the knowledge about the prevalence and risk factors could decrease the incidence and implement screening protocols for an early diagnosis.

METHODS: We compared the incident of non-cutaneous cancers after 10 years of follow-up in three cohorts of kidney transplantations: Group A non-induction antibodies therapy, Group B received thymoglobulin and Group C received antiCD25. All patients received steroids, calcineurin inhibitors (tacrolimus vs cyclosporine) and mycophenolate vs azathioprine. We performed a Kaplan Meier survival curves freedom of neoplasm between the three different groups. We analysed risk factors associated with the development of neoplasm.

RESULTS: Of the 474 kidney transplantations, 9% (43) had a non-cutaneous neoplasm after 10 years of follow-up. The neoplasms were: 9 kidney-urinary tract malignancies, 9 gynecologic, 5 prostate, 5 haematological, 3 gastrointestinal, 3 lung, 2 otorhinolaryngology, 2 thyroid, 2 neurological, 2 pancreas and 1 non differentiated. We shown in Table 1 the characteristics of the patients in the Group A, B and C.

The multivariate analysis shown that recipient age $> 55$ years (HR: 2.4 [CI 1.3-4.5, $p=0.006$]), previous hemodialysis as renal replacement therapy (HR: 1.9 [CI 0.96-3.7, $p=0.06$]) and previous neoplasm (HR: 4.1 [CI 1.8-9.3, $p=0.001$]) were the main factors to develop a neoplasm after kidney transplantation. 33 patients died after 10 years of the follow up, the main causes of deaths were cardiovascular (48.5%) and neoplasm (36.4%) causes.

CONCLUSIONS: The main non-cutaneous neoplasm were related with urinary tract, gynecologic and haematological. The age older than 55 years old, previous hemodialysis renal replacement therapy and previous neoplasm were the factors related with a develop of a neoplasm after kidney transplantation. We didn't find any relationship with immunosuppression induction therapy. Oncology cause was the second cause of death in our cohort. The introduction of a neoplasm screening programme after kidney transplantation could decrease the incidence of tumor and increase recipient survival.