

## Abstract# 2195

### Angiotensin Type 1 Receptor Antibodies in Transplant Glomerulopathy.

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Transplant glomerulopathy (TG) is a common cause of graft failure in kidney transplantation and is associated with donor specific antibodies (DSA). Angiotensin II type 1 receptor antibody (AT1RAb) and endothelin 1 type A antibody (ETARAb), two recently described non-HLA antibodies, are implicated as independent risk factor of acute vascular rejection in the absence of donor specific antibodies. In a single centre retrospective study, we analysed from the ANZDATA registry, all of the TG patients, transplanted between 1980 and 2011, who met with TG Banff criteria. All were tested by a solid phase assay method for AT1RAb and ETARAb and by Luminex single antigen for DSA. Eight percent (141 patients) of the 1729 patients recorded along the period study met the TG biopsy proven criteria. More than 50% of this TG group had a value for AT1RAb and ETARAb >10U/mL. Of the 89 TG patients tested for AT1RAb at transplantation, 38 were positive for AT1RAb. We showed a strong link between the value of AT1AbR and patient survival with a significant risk of death in the high value group (>17U/mL). The presence of DSA did not correlate with AT1RAb and 8 of the 38 patients developed TG were positive for AT1RAb tested at transplantation without DSA or HLA antibodies, suggesting an independent role of AT1RAb in TG. In conclusion, the prevalence of AT1RAb is high in this large cohort of TG and may be involved in the TG development independently of DSA. DISCLOSURE: Coates, P.: Speaker's Bureau, Alexion, Other, Novartis, AdvisoryBoard. Dragun, D.: Grant/Research Support, OneLambda, Novartis