Reviewer's report

Title: The association of tumor necrosis factor superfamily 13 with recurrence of immunoglobulin A nephropathy in living related kidney transplantation

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Reviewer: Lucile Mercadal

Reviewer's report:

The authors have studied the predictive value of tumor necrosis factor superfamily 13 (TNFSF 13) for the diagnosis of the recurrence of IgA nephropathy after kidney transplantation. 63 patients were included from whom 56 had a TNFSF 13 dosage. TNFSF 13 was not predictive of a recurrence in the entire cohort of patients but TNFSF 13 was predictive of a recurrence only among the 35 patients having a living related donor graft. It's an observational exploratory study.

Remarks:

How do you explain that TNFSF 13 would have a predictive value of recurrence in the field of living related donor graft and not in the entire set of patients?

Page 8 : "Renal function decline was defined as eGFR-time slope, differences in eGFR between the peak value in the post-transplant period within 2 months after kidney transplantation and the value at the time of last follow up time divided by follow up duration." Is the peak or the nadir?

Page 9: "Between-group differences were evaluated using the t-test for normally distributed continuous variables and Mann-Whitney U test for non-normally distributed continuous variables." The between-groups differences are the differences between the groups with recurrence versus without. You should precise the definition of the groups.

Page 10: "There was no difference between the groups in the proportions of patients treated with tacrolimus, cyclosporine or mycophenolate mofetil." Similarly, you should precise between the group with recurrence and the group without.

Page 10: "The rate of acute rejection was marginally higher among patients with than without IgAN recurrence. (p=0.051)." We can wonder if this difference is not due to a higher frequency of graft biopsy among the recurrence group because of proteinuria or/and hematuria, that made the diagnosis of histologic rejection more frequent.
Page 10: "Pre-transplant serum TNFSF13 levels in the study population were significantly higher than in the 382 patients with non-ESRD IgAN (mean 1.75±11.94 ng/mL)." How did you choose this population? The selection criteria should be detailed in the methods section.

Page 14 :" we were unable to demonstrate an association between antithymocyte globulin induction therapy and IgAN recurrence, as…” You may precise if it was a positive or negative association.

Page 14 : "Among the causes of kidney transplantation, glomerulonephritis accounts for a significant from Australia and New Zealand Dialysis and Transplant (ANZDATA) Registry, which has accumulated data over 30 years, showed that recurrence of IgAN was 5.1% at 5 years after kidney transplantation and 15% at 15 years."

Page 15 : "Our findings indicate a possible role of TNFSF13 level as a potential risk factor of IgAN recurrence among patients who undergo living related donor graft transplantation." Your study evidenced an association between TNFSF 13 and recurrence among subjects with living related donor graft. As this result is from an observational cohort, you cannot indicate that it is a causal association.

Table 2: precise n= 35; For the Gd-IgA1 hazard ratio, is it per unit of increase? For the TNFSF13 hazard ratio, is it per 10 ng/mL of increase or < versus > 10ng/mL (in 2 classes, like in the Kaplan Meier survival curve)?

Table 3: same remark concerning the HR, is it per 10 ng/mL of increase or < versus > 10ng/mL?

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review? If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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