Reviewer’s report

Title: Serum under-O-glycosylated IgA level is not correlated with glomerular IgA deposition based upon heterogeneity in the composition of immune complexes in IgA nephropathy

Version: 2
Date: 19 March 2014
Reviewer: Laureline Berthelot

Reviewer’s report:

• Major Compulsory Revisions
The authors have shown that the serum hypogalactosylated IgA level (total or from polymeric IgA) are not correlated with glomerular IgA deposition. We know that the glycosylation can influence the formation of IgA complexes. The authors should test also the correlation between the polymeric IgA level (whatever is the glycosylation status) and the glomerular IgA deposition area.

The authors concluded that the fact that there is no correlation between O-glysylation IgA level and IgA deposition may be due to the heterogeneity in the composition of immune complexes. But in this paper, there is a missing compartment: the urines. During the progression of the disease, proteinuria increases as well as level of IgA in the urines. The absence of correlation between levels of hypogalactosylated IgA in the circulation and the glomerular IgA deposition could be due to an increased loss of IgA in urines for patients with high proteinuria. The authors should check the levels of hypogalactosylated IgA (total and polymeric IgA) in urines.

For statistical analyses, the authors used an unpaired t-test. The numbers of IgAN patients and healthy controls are respectively 32 and 20. The authors should better used an non parametric test. The authors did not precise which test they used for correlation.

• Minor Essential Revisions
Page 3, line 3, the authors should replace “than in normal IgA1” by “than in normal individuals” or by “than normal IgA1”.

Page 22, line 7, the authors discussed on the C3 deposition and serum C3 level, but the C3 can also be produce by mesangial cells after stimulation with IgA. The authors should take this into account in the discussion.

Figure 2 e: the MFI for the positive control is missing.
Table 1: there is a missing “n” in “creatinine”.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.