Reviewer’s report

Title: Properdin has an ascendancy over factor H regulation in complement-mediated renal tubular damage

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Reviewer: Neil Sheerin

Reviewer’s report:

The authors describe a series of experiments supporting their hypothesis that properdin is involved in the activation of the alternative pathway of complement on renal tubular cells. Generally the work is well performed and clearly presented.

My main concern is the lack of novelty. Much of what is presented in the paper is already known for example complement products are found in the urine of proteinuric patients, tubular cells activate complement in a properdin-dependent manner.

One outstanding question is whether the tubular injury is due to complement activation. Multivariate analysis should be performed on the data to see whether the correlation between urinary complement protein concentration and markers of tubular injury (such as NAG) that is not explained by the relationship with proteinuria.

Following on from this I would be interested to know more about the different patient groups, particularly the patients with Minimal Change Disease. You would not expect significant tubular injury in this group. Do urinary complement levels reflect this?

Minor points:

1. The physiological concentration of FH is given, but not of properdin. This should be added.
2. It is not clear how the deposition of complement proteins on cells was quantified. Was some form of image analysis software used?
3. Fig 6. No factor H staining is seen on PTEC incubated with 25% serum, which would contain FH at a concentration that clearly binds to PTEC when isolated protein is used.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests