Reviewer’s report

Title: Intragenic duplication in the PHKD1 gene in autosomal recessive polycystic kidney disease

Version: 3 Date: 1 September 2015

Reviewer: Miguel Garcia-Gonzalez

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Comments:

Miyazaki et al., here described a case report of a complete strategy for prenatal genetic diagnosis of an autosomal recessive Polycystic Kidney disease (ARPKD). Indeed, we have some examples of our ARPKD cohort where we end up in the same outcome, identifying only one of the two possible mutations. Miyazaki et al. completed the right experiments to finally conclude with a positive diagnosis. The article has been written nicely and was very enjoyable to read. This case report will help readers to address the identification and validation of possible duplications in their patients when using exome sequencing, and possible in other NGS technologies.

I unconditionally support the publication if this case report if they address the following minor revisions.

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- Major Compulsory Revisions

None

- Minor Essential Revisions

Giving the fact that both mutations were identify in this case report, I consider this as a minor comment. Recently, novel exons for PKHD1 have been identified by Boddu et al. (Journal of Molecular Medicine 2014). We have to make sure that exome sequencing strategies covered those exons for genetic diagnosis. Author’s should mention if those exons were sequence. In addition, authors correctly mention that originally PKHD1 gene consisted of 86 exons, but this information does not include the novel exons reported by Boddu (Discussion section, page14, line 1). I would state this into the article.

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.