Reviewer’s report

Title: Transcript levels of Toll-like receptors 5, 8 and 9 correlate with inflammatory activity in Ulcerative Colitis

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Reviewer: Mathias Chamaillard

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The manuscript by Sánchez-Muñoz et al showed a significant correlation between disease activity and colonic expression of TLR5, TLR8 and TLR9 mRNA levels in Ulcerative colitis. The findings are consistent with previous reports showing an increased expression of the latter pattern recognition receptors in active disease (Int J Colorectal Dis. 2007 Mar;22(3):293-301; Scand J Gastroenterol. 2009;44(2):195-204; Inflamm Bowel Dis. 2010 Aug;16(8):1267-8). The manuscript is well written and easy to follow. However, it lacks an in-depth functional analysis to assess the relevance of the expression changes of TLR5, TLR8 and TLR9 on disease pathogenesis. Whereas the methodology used in this study is adequate, here are some suggestions that, I think, need to be considered:

- Is there any abnormal responsiveness to TLR5, TLR8 and TLR9 agonists of colonocytes from UC patients with quiescent disease?
- Is there any influence of the therapeutical management of the UC patients on changes of TLR5, TLR8 and TLR9 transcript levels?

Specific comments:

- In the abstract, the authors wrote that 50 UC patients were included in their study while in the methods section they mentioned that rectum biopsies were collected from 60 UC patients. This is confusing.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

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