Reviewer’s report

Title: Differences in gut microbial metabolism are responsible for reduced hippurate synthesis in Crohn’s disease.

Version: 1 Date: 31 August 2010

Reviewer: Carolyn Slupsky

Reviewer’s report:

The manuscript entitled “Differences in gut microbial metabolism are responsible for reduced hippurate synthesis in Crohn’s disease” by Williams et al. is a manuscript that measures hippurate excretion in control and CD patients using 1H NMR spectroscopy before and after ingestion of benzoate while subjects are on a low benzoate diet. After ingestion, the amount of hippurate in the urine of the control group and the Crohn’s group was similar, with a larger increase in hippurate in the Crohn’s group as compared to the control group. This was attributed to the enzyme kinetics of the synthesis of hippurate in the liver and kidney cells. Based on these results, the authors suggest that lower levels of hippurate in Crohn’s disease patients are due to altered gut microbial metabolism rather than a defect in hippurate synthesis.

This is a well-written manuscript, and the experiments seem sound. I recommend publication of this article as is.

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.