Author's response to reviews

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

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Author's response to reviews: see over
Dear Sir or Madam,

Thank you for considering this revised manuscript, ‘Differences in gut microbial metabolism are responsible for reduced hippurate synthesis in Crohn’s disease’ for publication in *BMC Gastroenterology*.

We thank the reviewers for their comments, and have endeavoured to address each of them.

**Reviewer 1:**
Reviewer 1 suggested publication ‘as is’.

**Reviewer 2:**
1. Reviewer 2 suggested that ‘The weakness of this paper is the lack of analysis of the gut microbiota composition in the studied patients. Correlation between dysbiosis and baseline urinary hippurate excretion would be interesting.’

   We agree with this statement and have added a sentence to this effect:

   Future studies correlating the urinary metabolic profiles of IBD patients with molecular analysis of their gut microbiota would be of great interest, representing an avenue for further research.

2. Reviewer 2 also stated ‘Although only descriptive, this study is useful as it points out a functional consequence of the dysbiosis in CD. This point should be mentioned in the discussion.’

   We have added the following comment:

   The findings of this study provide additional evidence for the systemic effects of an altered gut microbiome in IBD, notably identifying a functional metabolic consequence of the dysbiosis.

We have also made the formatting changes to the manuscript as you requested.

Thank you for further considering this manuscript,

Yours faithfully,

Dr. Horace Williams and Dr. Timothy Orchard on behalf of the authors.