Reviewer’s report

Title: E. coli diversity: low in colorectal cancer

Version: 1 Date: 27 Nov 2019

Reviewer: Thomas H. Hampton

Reviewer's report:

The authors read my request for statistical clarity but have declined to provide it. Figure 2B now includes dot plots of the number of strains identified in each group, as well as text suggesting a statistical test was performed. The authors do not specify the test they used in the methods or elsewhere, but I am guessing they used pairwise t tests. The t test is a true workhorse, but not really appropriate for count data. I see better from the figure what they are driving at: the CRC samples were notably lower than the seniors they measured. It looks as though the number of distinct species increases with age. Therefore, the correct design is to compare CRC patients to age matched controls and use an appropriate statistic for the comparison. The fact that children (in addition to CRC patients) have relatively few E coli strains is not the focus of this study. This remains interesting, but in my opinion the authors should talk to a statistician before attempting to resubmit this work.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

Does the work include the necessary controls?
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Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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Unable to assess

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I recommend additional statistical review

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