Reviewer's report

Title: Grape-supplemented diet for colon cancer prevention: Effects on proliferation and Wnt signaling greatest for those over age 50 and with high arginine consumption

Version: 1 Date: 22 April 2015

Reviewer: Karthikeyan Subbiurayan

Reviewer's report:

To
The author

The manuscript by Holcomb et al., describes the Grape-supplemented diet for colon cancer prevention: Effects on proliferation and Wnt signaling greatest for those over age 50 and with high arginine consumption. The authors suggested a different aspect of diet to prevent colon cancer of high risk individuals proved already in in vitro and in vivo. The significant changes in the expression of cMYC, cyclinD1 (CCND1), AxinII (AXIN2), and CD133 (Prominin1, PROM1) in real time PCR results also suggests that the Colonic proliferation was reduced in the individuals. In the study of colon cancer wnt signaling pathway plays vital role. Therefore, reduction in the expression of Wnt target gene cyclinD1 as well as other markers of cell cycling reveals the preventive effect of grape supplemented diet.

Some points are suggested for revision which compromises its quality. We suggest strong a revision on the structure of the article, including:

1) The manuscript is confusing in the clinical trial section kindly rewrite the section or provides table or diagrammatic representation for experimental clinical design and dosage?
2) Clarify the duration of work in the manuscript including pre, post analysis?
3) No detailed information about arginine consumption and dosage?
4) Addition of reference in Quantitative Real-time PCR (qRT-PCR)?
5) Suggested to add Comparison between pre and post grape immunohistochemistry?
6) Add Primer sequence in the materials and methods section?
7) In Figure 1 (I) legend the author mentioned Ki67 expression comparing cyclin D1 But in graphical representation it was mentioned as Axin 2?
8) Suggesting rewriting the manuscript with proper explanation to results thereby including all the parameters.
9) Author should follow journal guidelines particularly for reference section.
Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests