Reviewer's report

Title: Impact of daily supplementation of Spirulina platensis on the immune system of naive HIV-1 patients in Cameroon: A 12-months single blind, randomized, multicenter trial

Version: 1 Date: 4 June 2015

Reviewer: RAVI DYAVAR

Reviewer's report:

In this manuscript, titled, “Impact of daily supplementation of Spirulina platensis on the immune system of the native HIV-1 patients in Cameroon: A 12-months single blind, randomized, multicenter trial”, the authors reported the results of a human clinical trial in which a group of HIV-1 infected patients were provided 10 grams of Spirulina platensis dietary supplement in their local balanced diet and the other group received balanced diet alone. This study has several important implications in developing countries and demonstrated the significance of natural dietary supplements to control infectious diseases such as HIV. Though a previous report published in nutrition and metabolic insights journal by M. Azahi-kenfack et al has reported similar observations. The current study followed the patients for a longer time (6 months) and also followed the patients further 6 more months without Spirulina supplementation. Even after discontinued Spirulina supplementation, patients maintained higher CD4 T cell numbers and lower viral loads. These results are very encouraging and the study has clinical importance.

Minor comments.

1) It will be interesting to know the changes in Fat Free Mass and Total Body Fat to understand the changes in muscle mass and body composition.

2) Supplemental table 2 should be represented as table 1 in the main manuscript, which will be easier for readers to understand the differences observed at 0 and reorganize the table 2. The statistical data in Columns 2 to 6 does not align with Variable in Column 1.

3) In Figure 2, statistically significant differences between 0 Month and 6 Months and 12 months in Spirulina group should be shown within the figure with symbols.

4) In Figure 3, statistically significant differences between 0 Month and 6 Months and 12 months in Spirulina group should be shown. As well as, statistically significant differences in the increase of viral loads in 6 to 12 months in control group should be shown within the figure with symbols.

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