Reviewer's report

Title: Synbiotic therapy decreases microbial translocation and inflammation and improves immunological status in HIV-infected patients: a double-blind randomized controlled pilot trial

Version: 3 Date: 7 May 2012

Reviewer: Shunji Fujimori

Reviewer's report:

The authors show clinical usefulness of synbiotics for patients with infected HIV. In the results, usefulness such as increasing CD4 lymphocyte, decreasing IL-6, and increasing beneficial bacteria are better than prebiotics alone or probiotics alone. Unfortunately, the study size is small because four RCT groups each include only 5 patients. However, the study is very interesting and shows significant results. There are a few concerns with regards to the investigation. Please see below.

Major points

1) It is no wonder that total bacterial load in faces are increased in prebiotic group. If total bacterial load in faces are increased in also probiotic and symbiotic group, there are no wonder. The results of total bacterial load in faces mean a little. So, Figure 3 is unnecessary. And, P=0.05 should be described such as P=0.052 or P=0.048.

The results of decreasing total bacterial load in faces in probiotic and symbiotic groups, should be discussed.

2) Meanwhile, the results of increasing Bifidobacterium and decreasing Clostridium are very important. The data of changing these bacteria should be described in exact detail using a Figure.

3) Figure 5 should be included all four groups of IL-6 cytokine level.

Minor points

1) Detailed contents of placebo should be stated.
2) Introduction line 2, Ca. should be spelled out.
3) P 15 line 14, ART should be spelled out.

Level of interest: An article of outstanding merit and interest 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:

No