Author's response to reviews

Title: Topical Application of Concentrated Deep Sea Water (CDSW) reduces inflammation in Atopic Dermatitis-like Skin Lesions in NC/Nga mice

Authors:

Jong Phil Bak (jpbak77@gmail.com)
Young-Min Kim (dragonroom@hanmail.net)
Jung-Hyun Son (sison84@hotmail.com)
Chang-Ju Kim (changju@khu.ac.kr)
Ee-Hwa Kim (kimeh@semyung.ac.kr)

Version: 2 Date: 9 April 2012

Author's response to reviews: see over
April 9, 2012

Dear Editor,

We wish to submit a manuscript entitled “Topical Application of Concentrated Deep Sea Water (CDSW) reduces inflammation in Atopic Dermatitis-like Skin Lesions in NC/Nga mice” for publication in *BMC Complementary and Alternative Medicine*. We revised and checked carefully with native immunologist for the reviewer’s report. Please, the detailed contents refer to the lower part.

Thank you for considering our manuscript for publication.

Sincerely,

Jong Phil Bak, Ph. D
The Clinical Trial Center for Bio-Industry
Semyung University
117 Semyung-Ro
Jecheon, Chungbuk 390-711
Korea
Phone: +82-43-653-6305
FAX: +82-43-653-6302
E-mail: jpbak77@gmail.com
Answer report 1

Title: Topical Application of Concentrated Deep Sea Water (CDSW) reduces inflammation in Atopic Dermatitis-like Skin Lesions in NC/Nga mice

Date: 9 April 2012

To reviewer: Mao-Qiang Man

Reviewer`s report and answer:

All following need major revision:

1. This manuscript was poorly written. And English needs major improvement. It is not acceptable at present status.
   A: We revised and checked carefully with native immunologist.

Specific Comments:

Title:
1. The result and conclusion stated that CDSW has therapeutic effect on AD, however the title suggested the DSW exhibits preventive effect;
   A: The title of this manuscript was adjusted and was changed a focus on CDSW.

Abstract:
Results were not clearly presented;
   A: We tried to rewrite results in abstract

Materials and methods:
1. Unconcentrated DSW should be used as another control group;
   A: We tried to treat DSW to AD lesions. However AD skin lesions festered because DSW has high salt concentration.
2. The concentrations of elements for 2% CDSW should be given in table 1;
   A: We showed element of 100% CDSW in 1 already. We made 2% CDSW with 98% DW.
3. The method describing how dermatitis was induced and treated was not clear. a. Was DNCB still used after 4 weeks when mice were treated with CDSW and pimecrolimus? b. How was the working concentration of DNCB determined?
   A: We wrote detailed elucidation and supplemental figure 3 about process of DNCB-elicited AD mice.
4. The method to evaluate clinical severity is very subjective;
A: We added methods of each evaluation such as itch, erythema, edema, dryness.

5. How was epidermal thickness measured?
A: We measured epidermal thickness using Micron (EVOS) Ver. 2.0 is digital imaging software.

Results:
1. Methods should be removed from this section and placed in materials and methods section;
   A: We removed that section
2. The erythema and edema in figure 1A-e did not differ dramatically from that in figure 1A-d;
   A: We did not know what is mean your ‘dramatically’. Figure1A-e is ‘significantly’ different with figure 1A-d.
3. What did “*” mean in figure 1B;
   A: it means significantly different with Normal control
4. No magnification bars on figure 2A;
   A: We added magnification bars to figure 2A
5. What did “*” mean in figure 2B;
   A: It means significantly different with Normal control
6. The quality of figure 2A is not acceptable for publication;
   A: We changed figure 2A.
7. Figure 1B showed a nice difference between 2% and 10% CDSW. But there seems no difference in inflammatory cell infiltration between 2% (figure 3d) and 10% CDSW (figure 3e); Again, the quality of figure 3 is poor;
   A: We changed figure 3.
8. What did “*” mean in figure 4, 5?
   A: It means significantly different with Normal control
9. The significances were not well labeled in Table 2 and figure 6;
   A: The superscript was changed with the boldface.

Discussion:
The discussion is out of focus. Data should not be repeated in this section
A: We rewrote ours discussion and removed repeated section.
Answer report 2

Title: Topical Application of Concentrated Deep Sea Water (CDSW) reduces inflammation in Atopic Dermatitis-like Skin Lesions in NC/Nga mice

Date: 9 April 2012

Reviewer: Naoki Inagaki

Reviewer`s report and answer:

[1] Description on the method for inducing dermatitis is difficult to understand. Period between initial sensitization and weekly challenge is not indicated in the method section.

A: We wrote detailed elucidation and supplemental figure 3 about process of DNCB-elicited AD mice.

[2] Some discussion on the effective constituents and the mechanisms should be added.

A: We rewrote ours discussion and removed repeated section.

[3] To prepare spleen cell suspension, a glass homogenizer was used (page 7). Collect?

A: Collect. We used a glass homogenizer to isolate cell.

[4] “Th cell development cytokines (IL-2, IL-4, INF-g and TNF-a) in the serum” (page 7) appears. Is TNF-a a typical Th cytokine? In figure 6, results of IL-10 are indicated.

A: We made a mistake. It was wrong. TNF-α is pro-inflammatory cytokine. IL-4 and IL-10 are development cytokines from Th cells

[5] “with the 10% CDSW-treated mice nearly recovering to the same level as the 1% pimecrolimus-treated mice” appears (page 9, figure 1B). It seems to be incorrect.

A: We agreed your opinion. We changed expression to “significantly blocked enhancement of clinical score”

[6] Description on figure 3 (page 9) seems to be insufficient.

A: We rewrote


A: We made a mistake. Anti-steroid and anisteroid were wrong. “Steroid” is collect.

[8] There are so many in correct or in appropriate description in the manuscript. It has be revised carefully, and checked by a native speaker with immunological knowledge.

A: We revised and checked carefully with native immunologist.