Reviewer's report

Title: Water soluble extract of Phellinus linteus modulates experimental atopic dermatitis

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Reviewer: Shuichi Segawa

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In this study, authors clearly demonstrated that P. linteus treatment significantly improved the atopic dermatitis symptoms in mice and prevented the up-regulation of some inflammatory cytokines. P.linteus might be promising material to alleviate human allergic symptom. However, there are several issues that should be attended by the authors.

Major point

1. You induced atopic dermatitis in mice by painting DNCB and mite extract for 4 weeks. After 2 weeks of AD induction, you started P. linteus WA or ceramide treatment. At the 2 weeks of AD induction, nevertheless at this point of time you did not start the intervention, the ear thickness of control group was significantly increased compared to P. linteus WA or ceramide treatment group. I am concerned about the possibility that the grouping of mice in your experiment might be inappropriate.

2. You investigated the effect of P. linteus on cell viability by MTT assay. The administration of P. linteus significantly increased the cell viability at 0.5 mg/ml, however at the concentration of 0.75 mg/ml, cell viability was significantly decreased. You had better explain this drastic change in cell viability by the administration of P. linteus.

Level of interest: An article of limited interest

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.