Author's response to reviews

Title: B7-H4 gene polymorphisms are associated with sporadic breast cancer in a Chinese Han population

Authors:

Jie Zhang (zjsxzj.029@gmail.com)
Mingyan Zhang (zhmybird@hotmail.com)
Wei Jiang (jiangweilh@gmail.com)
Lihong Wang (jiangwlh@gmail.com)
Zhenkun Fu (zhenkun_fu@yahoo.com.cn)
Dalin Li (lidalin1975@163.com)
Da Pang (pangdasir@163.com)
Dianjun Li (dianjunli@163.com)

Version: 3 Date: 20 October 2009

Author's response to reviews: see over
Dear Editor:

Thank you very much for your letter dated September 29 enclosing your and the reviewer’s comments for our manuscript entitled “B7-H4 gene polymorphisms are associated with sporadic breast cancer in a Chinese Han population” (MS: 1667399579280912). We appreciate your valuable comments and suggestions on how to improve it. With regard to the comments and suggestions, we would hereby like to submit a revised manuscript. Please find below the correspondence to you and your reviewers concerning your comments and suggestions about the manuscript.

We wish to take this opportunity to thank you for considering our paper for publication in your journal.

Best Regards,

Yours sincerely,
Professor Dianjun Li
Department of Immunology,
Harbin Medical University,
Harbin, Heilongjiang, 150081, P.R. China
Email: dianjunli@163.com
To reviewer #1

Reviewer's report 1

Title: B7-H4 gene polymorphisms are associated with sporadic breast cancer in a Chinese Han population

Version: 2 Date: 18 September 2009

Reviewer: Rulla May Tamimi

Reviewer's report:

Major Compulsory Revisions: None

Minor Essential Revisions: None

Discretionary Revisions:

The authors have made significant improvements to the manuscript and have addressed all of the major concerns. Two minor issues remain:

1. Although in the response to the Reviewer’s comment, the authors have indicated that they included 10% of replicate samples as QCs for genotyping and that they had high (?) validity/reliability. I would suggest that the Reviewers add a sentence to the methods letting readers know this also and indicating the exact concordance of replicates.

Thank you for your valuable advice.


Our results of sequencing were consistent with these concordances proposed in the references. We have now added the sentence to the methods. Our manuscript is modified as below (blue words):

“Annealing temperatures were rs10754339 (53.2°C), rs10801935 (55.6°C), and rs3738414 (55.6°C). The lengths of PCR products were rs10754339 (341bp), rs10801935 (466bp), and rs3738414 (419bp). And restriction enzymes were rs10754339 (MscI), rs10801935 (Sall), and rs3738414 (BtsI). In order to ensure quality control of genotyping results, we randomly selected 10% of the samples to direct sequencing, and the results were consistent with the PCR-RFLP results.”

2. The question regarding matching in the analysis is in reference to the regression analysis. Was conditional logistic regression done to take the matching into account? Or was logistic regression adjusted for the matching factors done? Based on the authors response it appears that matching was only done on age and it is likely that this will not influence changes in the results. The authors should at least indicate that an analysis that took the matching into account (i.e., adjusted for age) did not alter the results.

Thank you very much for your suggestion. We have now analyzed the influences using logistic regression to take the matching into account. We found that the P value for age was 0.058, larger than the P values for the other three factors (P = 0.003 for rs10754339, P = 0.009 for rs10801935, and P = 0.001 for rs3738414). In addition, the OR of each SNP was not significantly different with age added as an independent factor or not (with age: OR = 0.711 for rs10754339, OR = 1.389 for...
rs10801935, OR = 1.481 for rs3738414; without age: OR = 0.698 for rs10754339, OR = 1.408 for rs10801935, OR = 1.527 for rs3738414). The results mean that the age was not a significant confounding factor. So we think that the original results were not altered

**Level of interest:** An article whose findings are important to those with closely related research interests

**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.

**To reviewer #2**

**Title:** B7-H4 gene polymorphisms are associated with sporadic breast cancer in a Chinese Han population

**Version:** 2 **Date:** 29 September 2009

**Reviewer:** Kathleen Torkko

**Reviewer's report:**
I re-read the edited paper submitted by the authors. I believe that they answered my concerns and made appropriate corrections in the manuscript. I am satisfied that the paper is now ready for publication in your journal.

Thank you very much.
Suggestion from editor
Please can you also document ethical board approval in the Methods section of the manuscript.

Thank you for your advice, and we have now indicated in the manuscript that our study was conducted with ethical board approval from the Third Affiliated Hospital of Harbin Medical University. Our manuscript is modified as below (blue words):

“The blood samples of the cases in our study were provided by the Department of Abdominal Surgery (The Third Affiliated Hospital of Harbin Medical University). They were collected from 500 Chinese women with sporadic breast cancer (mean age ± SD: 46.2 ± 7.6 years), and medical records were used to further confirm their pathological and clinical information of diagnoses (table 1). The blood samples of controls were contributed by 504 healthy women volunteers with matched ages who were from the same district (mean age ± SD: 43.0 ± 7.2 years). They were all selected randomly without any history of personal and familial malignancy or autoimmune diseases. All of the cases and healthy controls were recruited from Heilongjiang province of China during 2007 and 2008. Before the beginning of this study, ethical board approval from the Third Affiliated Hospital of Harbin Medical University was obtained, and each of the cases and controls signed the written informed consent.”