

Deregulation of interferon-gamma receptor 1 expression and its implications for lung adenocarcinoma progression.

Responses to Reviewer

We thank the reviewer for all the suggestions and observations about our manuscript. Moreover, we recognized the critical questions from the reviewer; many of them are open fields to investigate.

1. The wording should be modified to be more precise and understandable, and the wrongly written words should be corrected.

This version of our revised manuscript has been sent to a professional English language editing company.

2. The introduction for LUAD was too lengthy and seemed little relevance with the theme.

We thank the reviewer for this observation. In this version of our manuscript, we have modified the introduction.

Section: Introduction

3. A table regarding the expression profile of IFNGR1 in cancer is recommended to list.

4. What about the IFNGR2 expression in cancer?

We thank the reviewer for this recommendation. We have added a table with the expression of IFNGR1 and IFNGR2 in several cancer types compared to normal tissue, according to the UALCAN database. We briefly discussed this information in the manuscript.

Furthermore, we have added a recent paper about IFNGR2 and cancer. However, the studies on *IFNGR2* expression in cancer are more limited than those on *IFNGR1* expression. Thus, more studies, mainly on IFNGR2 in cancer, are required.

Section: The expression of *IFNGR1/2* is deregulated in several types of cancer.

5. There are polymorphisms in IFNGR1 promoter in cancer, what about its mutation in cancer?

This is an interesting question. Nevertheless, we have only found some reported evidence about *IFNGR1* polymorphisms and their association with several cancer types. We have added this information.

Section: The expression and abundance of IFNGR1 are altered in several cancer types.

6. This manuscript has described the ubiquitin and palmitoylation in IFNGR1 regulation, are there other posttranslational modifications?

According to the available information, we have described posttranslational modifications involved in the stability and function of IFNGR1, such as phosphorylation, ubiquitination, palmitoylation, and glycosylation of this receptor. This information has been added to our manuscript. However, other posttranslational modifications may regulate IFNGR1, which are pending elucidation.

Section: The expression and abundance of IFNGR1 are altered in several cancer types.

7. Since there was deregulation of IFN-signaling pathway in other kinds of cancer, why focusing on LUAD? 8. What is the prognostic value of IFNGR1 expression in LUAD, and are there cooperative predictive value with JAK1/2?

These are interesting questions. As was mentioned in the manuscript, It has been suggested that *IFNGR1* expression may be a valuable biomarker for LUAD. However, the relationship between IFNGR1 and JAK1/2 in LUAD has not been evaluated. This aspect would be essential to be evaluated.

Response to Science editor:

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Our figures are original and generated de novo by the authors of this paper. We have followed the instructions from the science editor.

(2) The labeling of P value in the figures does not meet the requirements of WJG, please don't include any *, #, †, §, ‡, ¥, @....in your manuscript; Please use superscript numbers for illustration; and for statistical significance, please use superscript letters. Statistical significance is expressed as aP < 0.05, bP < 0.01 (P > 0.05 usually does not need to be denoted). If there are other series of P values, cP < 0.05 and dP < 0.01 are used, and a third series of P values is expressed as eP < 0.05 and fP < 0.01.

Thank you for this observation. We have followed these indications to express statistical significance in our manuscript.