Author's response to reviews

Title: Expression of tumor-specific antigen MAGE, GAGE and BAGE in ovarian cancer tissues and cell lines

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Author's response to reviews: see over
Title: Expression of tumor-specific antigen MAGE, GAGE and BAGE in ovarian cancer tissues and cell lines

Version: 2 Date: 13 January 2010

Reviewer: Yao-Tseng Chen

Reviewer's report:

Major Compulsory Revisions:

This study aims at analyzing the frequency of CT antigen expression in ovarian cancer. The 6 cases of so-called "metastatic ovarian cancer" were not "ovarian cancer that have metastasized to other sites", but rather "primary tumors--including 4 GI cancers--that have metastasize to ovary". These created several problems:

1. Metastatic cancers will have a CT-expression frequency closer to their primary tumor, and it makes absolutely no biological sense to compare the frequencies of CT expression in this group to the frequencies of CT expression in the primary ovarian cancer. [For example, melanoma is a tumor type that very frequently (>50%) expresses CT antigens. When melanoma metastasize to lung, they still express CT antigens very often. On the other hand, colon cancer expresses CT antigen much less frequently (<10%), even when they metastasize to lung. And it makes no biological reason to compare CT expression frequency in primary lung cancer to that of a mixture of colon cancer, melanoma, and other tumors, that have metastasized to lung, as the frequency in the metastatic lesions will be purely decided by what primary tumors they are from].

2. Also, if there were 6 cases of metastatic disease, these cases would automatically be Stage IV disease, and yet the authors claimed that there were only 4 stage IV cases. This is simply impossible.

3. Also, since these 6 cases were not even ovarian primary, they should not be graded based on the ovarian cancer grading system into G1, G2 and G3, so the grading does not make sense.

For these three reasons, particularly the first one, it is absolutely mandatory that these 6 cases of metastatic lesions be excluded from the series, and all the numbers in the text and tables should then be revised and re-calculated based on the data on 41 cases of PRIMARY ovarian cancer only, not on 47 cases. If this revision is not carried out, this paper should be considered as unacceptable for publication.

Many thanks for the comments. We have carefully checked and revised all the numbers in the text and tables. In cases of PRIMARY ovarian cancer only, the datas have been re-calculated. The corresponding changes are listed below.

1. Abstract/ Methods: 47 cases has been changed to 41 cases;
2. Abstract/ Results:
   “In ovarian cancer tissues, MAGE-1 and MAGE-3 was highly expressed, with expression rates of 53.7% (22/41) and 36.6% (15/41), while GAGE-1/2 and BAGE had relatively low expression, with rates of 26.8% (11/47) and 14.6% (6/41). In metastatic lesions of ovarian cancer,”

3. The second part of Materials and Methods:
   “41 cases of ovarian cancer samples and 7 cases of metastatic lesions of ovarian cancer samples.”
   “Of the 41 cases of ovarian cancer, there were 18 cases with serous cystadenocarcinoma, 13 cases with mucinous cystadenocarcinoma, 6 cases with endometrial carcinoma, and 4 cases with clear cell tumors. There were 5 cases in Stage I, 9 cases in Stage II, 23 cases in Stages III and 4 cases in Stage IV. With regards to histological grading, 6 cases were in G1, 18 cases were in G2 and 17 cases were in G3. There were 15 patients with ascites and 26 patients without ascites. Lymph node metastasis occurred in 15 cases. The patients aged between 23 and 65 years, with an average age of 45.2 years.”

4. The second part of Results:
   “In ovarian cancer tissues, MAGE-1 and MAGE-3 were highly expressed with expression rates of 53.7% (22/41) and 36.6% (15/41), while GAGE-1/2 and BAGE had relatively low expression rates of 26.8% (11/47) and 14.6% (6/41). In metastatic lesions of ovarian cancer, only MAGE-1 and BAGE were expressed with expression rates of 28.6% (2/7) and 14.3% (1/7)”

5. The third part of Results:
   “In serous cystadenocarcinoma samples, the positive expression rates of and MAGE-3 were 77.8% (14/18) and 66.7% (12/18), which were significantly higher than that in other types of ovarian cancer (P < 0.05). Although the expression of GAGE-1/2 and BAGE was low in ovarian cancer tissues, their positive expression rates were relatively high in serous cystadenocarcinomas (Table 3).”

6. The forth paragraph of Discussion:
   “In ovarian cancer tissues, MAGE-1 and MAGE-3 genes were highly expressed with a positive rate of 53.7% (22/41) and 36.6% (15/41), respectively. ..............
   The expression rates of the GAGE-1/2 and BAGE genes in ovarian cancer were 26.8% (11/41) and 14.6% (6/41),”

7. The fifth paragraph of Discussion:
   47 cases has been changed to 41 cases.
   All those changes have been highlighted in RED font. Table 2 and 4 have been revised too.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

  We’ve invited an English-native professor to proof language throughout the manuscript.

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.
Reviewer's report

Title: Expression of tumor-specific antigen MAGE, GAGE and BAGE in ovarian cancer tissues and cell lines

Version: 2 Date: 11 January 2010

Reviewer: Mai-Britt Zocca

Reviewer's report:

The authors have answered the reviewer report satisfactory.

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