Reviewer's report

Title: DMBT1 expression is down-regulated in breast cancer

Version: 1 Date: 14 May 2004

Reviewer: Fernando Schmitt

Reviewer's report:

General

This paper describes the pattern of expression of DMBT1 (deleted in malignant brain tumour 1) gene in a series of normal and breast lesions (benign and malignant). DMBT1 role in tumorigenesis is been shown to be different from the classic tumour suppressor gene. It has been shown to be involved also in immune response and epithelial differentiation. Several studies are trying to unravel apparent multifunction proprieties of DMBT1. The same group published already a very similar work (Mollenhauer J et al. Genes Chromosomes & Cancer 39: 185-194, 2004). Studies designed to try understand the steps of progression in breast carcinomas are of interest. However, in the present some methodological and conceptual issues need to be addressed.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. Based in your own results the authors conclude that the redistribution and up-regulation of DMBT-1 in normal and hyperplastic tissues flanking tumours and its down-regulation (?) in carcinomas is consistent with its role in breast carcinogenesis. This is clearly an overstatement. The authors should modify their conclusions because their results are not enough to state that DMBT1 has a consistent role in breast carcinogenesis.
2. One of the goals of the work was to analyse the relation of DMBT1 with cell cycle. Although they showed a concomitant expression with MCM5 it would be interesting if they quantify KI-67 in all lesions and study the relation with DMBT1 expression.
3. Based on the data presented, it is not possible hypothesizes that SP-A and DMBT1 co-expression serves as protection barrier. It would be need further analysis, such as double-immuno assays to confirm at least the co-expression of the markers in the analysed cells.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. The quantification of DMBTh12 in Table 2 is unclear. The authors should modify the Table in order to be more easily read.
2. The results section could be improved and described more clearly.
3. The authors should maintain the consistency in reagents manufactures description, e.g. page 6 (Biogenex, S.Ramon, CA, USA) and page 7 (Foster City CA,USA).
4. The authors should maintain the consistency of gene spelling, it should be written in italic form.
5. Page 11 3rd line, considerer to change sentence. Mollehauer et al paper is already published.
6. There are several typos and grammatical errors along the text that must be thoroughly revised.
Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**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

**Statistical review:** No

**Declaration of competing interests:** None