Reviewer's report

Title: Novel markers for differentiation of lobular and ductal invasive breast carcinomas by laser microdissection and microarray analysis

Version: 2 Date: 8 January 2007

Reviewer: Rémi Houlgatte

Reviewer's report:

General

The authors have made major revisions making their objectives more clear.

From the actual version,

The positive points are:
1) There is a lot of work in that paper: laser microdissection, Affy microarrays, TMA, In situ hybridization (asporin).
2) Even if the initial clustering shows noisy data (absence of correlated expression in figure 1), the method used by the authors (Pairwise comparaison and Rank products) allowed them to find differentially expressed genes in Normal/Tumors and Ductal/Lobular comparaisons, and those genes were validated by TMA.

The negative point is:
3) the discussion and conclusion focus too much on TGFB and Wnt signaling. The results presented in this paper does not really support that hypothesis.

One remark:
4) It should be more interesting to discuss the distinction between Ductal and Lobular samples. No antibody is able to distinguish perfectly these 2 kinds of samples (Table 7). Is the combination of antibodies tested able to do that distinction ? That is, Is that distinction clear? This point could be discussed, and would improve the paper.

What next?: Accept after minor essential revisions

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