Author's response to reviews

Title: Expression of centromere protein F (CENP-F) associated with higher FDG uptake on PET/CT, detected by cDNA microarray, predicts high-risk patients with primary breast cancer

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Author's response to reviews:

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Title: Expression of centromere protein F (CENP-F) associated with higher 18F-FDG uptake on PET/CT, detected by cDNA microarray, predicts high-risk patients with primary breast cancer

Thank you very much for your revision. We have improved the content of our manuscript according to the referee’s comments as follows.

Reviewer's report

Title: Expression of centromere protein F (CENP-F) associated with higher FDG uptake on PET/CT, detected by cDNA microarray, predicts high-risk patients with primary breast cancer

Version: 6 Date: 19 November 2008

Reviewer: Emmanuelle Jauffret

Reviewer's report:
I really do think that SUV can really be an interesting setting, but mainly to predict response to chemotherapy in neoadjuvant chemotherapy rather than in adjuvant setting. Anyway, authors reported here another prognostic factor in breast cancer, that seemed to be independant from others. as CENP-F is significantly correlated with DFS in uni- and multivariate analysis. I'm really surprised that in the population authors used, ER status is not significantly correlated with DFS nor OS.

Minor Essential Revisions: we need to know cut-off for Ki67 (thresold at 0 makes no sense)

We have correctly mentioned that the cut-off of Ki67 was 10 % in the method in line 7 to 9, page 12 and the table 4.

If the purpose is to find another new prognostic marker, it should be also compare to other markers: were the prognostic groups defined by authors compared with molecular classification?

authors said that there is no significant correlation between SUV and molecular subtypes even if basal, HER-2 and Normal displayed high SUV, it should be interesting to be able to know if there is a prognostic impact of SUV in different subtypes. In particular, how are the luminal A that are SUV or CENP-F positive?

We have added the data of correlation of molecular subtypes and SUV in Table 3, and added the sentences in the result, line 18 to 23, page 14 that `Seven (78%) of 9 tumors of the HER2 subtype, 4 (80%) of 5 tumors of the triple-negative subtype were categorized in the high SUV group, while 16 (48%) and 17 (52%) of 33 tumors of the luminal-A subtype were divided in the high and low SUV groups, respectively. Tumors of the HER2 or triple-negative subtypes were more frequently included in the high SUV group than the luminal-A subtype (p = 0.05) (Table 3)`.

We have added the definition of molecular subtypes in the material and method, in line 15 to 18, page 12 that `According to the status of ER and HER2, the 47 cases were classified into molecular subtypes, i.e., ER+/HER2- (luminal A subtype), ER+/HER2+ (luminal B subtype), ER-/HER2+ (HER2 subtype), and ER-/HER2- (triple-negative subtype).`

We have added the paragraph in the discussion in line 14 to 21, page 20 that
‘Interestingly, the majority of tumors with HER2 and triple-negative subtypes were included in the high SUV group, while tumors of the luminal-A subtype displayed both the high SUV and low SUV groups (Table 3). We suggested tumors of the HER2 and triple-negative subtypes might feature high proliferation activity, while the luminal-A subtype could be comprised of tumors with various proliferation activity. We need further long-term follow-up survey of patients and compare the prognostic impact of SUV between the high and low SUV groups of the luminal-A tumors’.