Reviewer's report

Title: Gross cystic disease fluid protein 15 (GCDFP-15) expression in breast cancer subtypes

Version: 1
Date: 19 April 2014

Reviewer: Semir Vranic

Reviewer's report:

In this study, the authors explored the relevance of GCDFP-15 in a large cohort of breast cases providing its different expression, associations and potential predictive and prognostic importance.

Major compulsory revisions:
The authors based their classification of breast tumors solely on the basis of steroid receptor profile and Her2. What about morphologic features of the tumors (n=43) you classified as “molecular apocrine tumors”? Do they fulfill all the morphologic criteria for apocrine differentiation (see also Vranic et al. Histology and Histopathology 2013)? “Molecular apocrine tumors” as defined by Doane et al. and Farmer et al. do not necessarily correlate with morphologically defined apocrine tumors with ER-/AR+ immunophenotype. Also, Weigelt et al. (2008) classified pleomorphic lobular carcinomas in the category of “molecular apocrine signature”.

Given that GCDFP15+ breast tumors appear to have a better prognosis, what was the pCR in a subset of “molecular apocrine tumors”? Looking back at your paper (Loibl et al. BCRT 2011) I could not find anything specific to apocrine tumors. I find this issue very important as this is still an unresolved issue (for review please see Vranic et al. Histology & Histopathology 2013).

What about other special types in your study?
Prognostic relevance of GCDFP-15 should be cautiously interpreted as the mean OS and DFS are too short (around 3 years).

Minor essential revisions:
Cutoff for AR should be clearly stated in Materials and Methods; why the 10% cutoff was applied for ER and PR? Is there any difference in results and associations if the cutoff is set at 1% as recently recommended?

Level of interest: An article of importance in its field

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

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.