Reviewer’s report

Title: Elevated MED28 expression predicts poor outcome in women with breast cancer

Version: 5 Date: 27 April 2010

Reviewer: Gulisa Turashvili

Reviewer’s report:

The study is based on a single TMA data and survival analysis of <100 patients. This would be a limitation of any manuscript which can still produce sound data.

Major Compulsory Revisions

Minor Essential Revisions

Methods

1. According to the cover letter, 'The 32 patients with more than one surgical procedure are individuals who remained in the UCLA Health Care system and who had recurring tumors. This has now been stated in the Methods'. However, Methods section describes that '79 were follow-up surgeries (re-excisions, recurrences)'. Thus it is unclear why there are 242 (not 79 + 210) tissue samples from 210 patients. The next sentence states that 'There are 213 cases from patients with breast cancer and 29 cases from patients without breast cancer (breast reductions)'. Note that 213 and 29 do add up to 242. So are there 242 patients??? If there are 242 tissue samples from 210 patients, who are the 213 patients? Did any of the reduction mammoplasties show breast cancer? It may be better to use TISSUE SAMPLE instead of CASE because readers will confuse CASE numbers with PATIENT numbers. Furthermore, 'The spectrum of overall case histologies from patients with cancer includes cases with both invasive and in situ tumor (122 cases); invasive tumor alone (57 cases); and in situ tumor alone (22 cases)' - these numbers add up to 201, not 213. So this is all very confusing. It may be useful to add a table describing all these numbers properly, for instance, this table can show how many cancer patients had invasive tumor, recurrent tumor, metastatic tumor, positive lymph nodes, accompanying DCIS, pure DCIS etc. So this table should show a total number of patients and a breakdown of 242, 213, 210, and 179 case numbers that are mentioned in the text.

2. 'Within our group of patients with invasive tumor (179 cases total), 72 cases were associated with metastases. Forty-nine of these patients presented with metastasis at their first surgery...'. Clarify that these are lymph node metastases.

3. Figure 1G is not cited in the text.

Discretionary Revisions
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests: I declare that I have no competing interests