Reviewer's report

Title: Qualitative and Quantitative Proteomic Analysis of Nipple Aspirate Fluid from Women with Early-Stage Breast Cancer using Isotope-coded Affinity Tags and Tandem Mass Spectrometry

Version: 2 Date: 26 January 2006

Reviewer: Hon-Chui Eastwood Leung

Reviewer's report:

General

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

If the authors did not show validation assays of other markers, the title should be only limited to "up-regulation of vitamin D binding protein in breast cancer patients...". The use of the word "proteomic analysis" is not appropriate as the standard for proteomics analysis these days includes validation of differential markers.

A more detail analysis of the Western blot results, such as ROC curve and area under ROC curve should be presented so that the potential of applying this assay in clinical setting can be revealed.

The questions about missing cysteine containing peptides and finding one peptide of Vit D binding protein without cysteine residue point to the optimization of the labelling condition. It seems that the authors did not address this adequately. In addition, the questions about only checking on two most prominent peptide in MS/MS also suggesting that the authors may miss a list of potential differential biomarkers.

Why are we still getting Figure 3 and 4 but not figure 3a and 3b?

At the footnote of Table 1, "Ratio of 999 indicates no detection of the NAF..." whilst in the table "999" has already replaced with "N/A". The question about "999" has been asked by multiple reviewers and I would expect the authors to pay a lot of attention to this before resubmission.

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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)

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Discretionary Revisions (which the author can choose to ignore)

What next?: Reject because scientifically unsound

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No
Declaration of competing interests:

I declare that I have no competing interests.