

Reviewer's report

Title: Epithelial cells in nipple aspirate fluid and subsequent breast cancer risk: a historic prospective study

Version: 3 **Date:** 5 November 2007

Reviewer: Carol Fabian

Reviewer's report:

The manuscript has been improved, however, there are still change I would suggest.

Introduction, p2

1. 4th line – delete “despite advances in imaging technologies” for reasons cited in first review.

2. Starting with line 5, the rest of that paragraph is either somewhat incorrect or is a poor transition. I would say something to the effect of . . . Risk biomarkers with a lifetime positive predictive value for breast cancer of >30% are limited to individuals with a deleterious mutation in genes responsible for hereditary breast cancer or a diagnosis of LCIS or atypical hyperplasia plus family history of breast cancer in a woman undergoing a diagnostic biopsy. The vast majority of women interested in risk assessment would not qualify for germline genetic testing nor have they undergone a diagnostic biopsy.

Discussion, p7-8

1. The wording in the first five lines of the first paragraph in the discussion is awkward and does not transition well into the third sentence. I would delete it.

2. Suggest starting with your fourth sentence or simply something like . . . Interrogating the breast epithelium directly with core needle biopsy is an unrealistic tool for determination of risk for the majority of women without significant family history or other major risk factors for breast cancer. NAF is an inexpensive, non-invasive method for evaluating breast epithelium. Tice et al . . .

3. When your referent group is a combined group of no fluid and fluid with no cells it is still not clear to me that sterling epithelial cells per se is a risk biomarker – although pragmatically if you have no fluid you will not have any epithelial cells. Perhaps changing the sentence beginning on line 13 to “Our findings would appear to confirm that women with cellular NAF have a high risk of cancer than those with no NAF or NAF without epithelial cells.

Tables

1. Table 1 – avoid use of unclear abbreviations such as qx for questionnaires.

2. Table 3 – fluid without cells is much clearer than “insufficient specimen”.

What next?: Accept after minor essential revisions

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

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

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