Reviewer's report

Title: Cost-effectiveness of a 21-gene recurrence score assay versus Canadian clinical practice in women with early-stage estrogen- or progesterone-receptor-positive, axillary lymph-node negative breast cancer.

Version: 2 Date: 30 July 2012

Reviewer: Chris Skedgel

Reviewer's report:

After reviewing the original reviewers' comments and the revised manuscript, I have very few issues. Although I agree with Reviewer 1 that sensitivity and specificity are of particular interest in evaluating a new test, I accept that such data are not available to address the immediate decision problem. The authors' approach, of modeling two alternative states of the world based on their best estimates of chemotherapy use with and without the RS-assay, appears to be a reasonable solution to this limitation. The cost-effectiveness calculations appear appropriate, and I am satisfied with the authors' response to the other criticisms.

Major compulsory revisions

There is at least one other evaluation of RS-assay in a Canadian setting that should be incorporated (Lamond et al, Breast Cancer Research & Treatment 2012).

Discretionary revisions

In the sensitivity analysis, I found the phrasing "the RS-assay generated negative incremental cost and effect..." to be unclear. Was incremental cost negative (good), incremental effect negative (bad), or both (ambiguous)? Table 4 (which otherwise I quite liked in terms of presentation format) does not help clarify this point.

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I am co-author on a publication that evaluated the cost-utility of 21-gene risk scoring assay and came to similar conclusions as the current manuscript. I declare that I have no other competing interests.