Reviewer's report

**Title:** Prognostic factors for breast cancer patients with axillary lymph node dissection (pathological stage I-III) and the reversal of survival rate between estrogen receptor positive and negative breast cancer patients after long term survival

**Version:** 1  **Date:** 2 June 2008

**Reviewer:** Michael Dixon

**Reviewer's report:**

Essentially what the study shows is that ER positive cancers do well initially but that such patients have a lower rate of initial relapse and then that rates continues whereas ER negative patients have a higher rate of initial relapse which then falls. This is well recognised and the authors should reference the work of Saphner et al (JCO 1996; 14: 2738-2746) which looked at many thousands of women in the US.

As such, therefore, this observation is not new. What is clear is the authors’ conclusions are wrong. I do not think you can say from their data that the prognosis for ER positive patients is worse than that for ER negative patients 10 years after surgery, in neither curve at 10 years is the ER positive survival lying below that of the ER negative group.

I would ask the authors to reassess this paper, looking at the data by Saphner et al.

What it also might be useful to do is to look as Saphner did at the annual rate of events in patients with ER positive and negative cancers. What Saphner showed was that the annual hazard rates for breast cancer recurrence by ER status for the first four years were higher for ER negative patients of whom there were 1,305 compared with ER positive patients where there were 2,257; after four years the annual hazard rate up to 12 years for patients with ER positive cancers was actually above that of ER negative cancers and by nine to 12 years the hazard ratio in ER negative cancers was extremely low.

This is a confirmatory paper, it does not add anything new but it does add to the body of literature and providing it is reanalysed and the authors draw conclusions which are appropriate to their data, and they reference studies which have looked at this previously in much greater detail, then I am happy it is published.