Reviewer’s report

Title: Effects of interval between age at first birth and age at diagnosis on breast cancer survival according to menopausal status: A register-based study in Korea

Version: 3 Date: 18 May 2014

Reviewer: Patrick Neven

Reviewer’s report:

Major Compulsory Revisions:
Age at breast cancer diagnosis is missing (the terms pre- and postmenopausal are fine but we need age at diagnosis)/ Did they exclude women who had neoadjuvant treatment/ primary metastatic disease?

Please provide us with data for breast cancer mortality by breast cancer type (ER-status) to make these conclusions more understandable. This is important as reproductive factors affect these different types of breast cancers differently. They describe to have these variables but why were these not included in the results/outcome apart from being descriptive?

2/3rd of the population had another or other pregnancies after the first one.
- Please provide us with data on the effect of time intervals since last pregnancy and breast cancer outcome.
- The authors didn’t include breast cancer patients who had another pregnancy after breast cancer treatment/ which proportion and how might this affect results (is selection bias possible as they mainly include premenopausal in their analysis)

Please provide us with data on adjuvant breast cancer treatment during / throughout the study period (did it change?)

How clinically relevant is a significant HR of 1.03 (table 6)

Please explain the large number of premenopausal/postmenopausal breast cancer diagnosis in this database from Korea. How do they explain 617/14387 non-breast cancer deaths in premenopausal and 440/6761 in postmenopausal being related with reproductive factors?

Discretionary Revisions

Please shorten the background as there is some repetition in this part of the paper.

Be consistent when defining early AFP/ Please be consistent with using AFP (AFB)

Follow-up duration differs between AFP and parity (table 2-3)
Level of interest: An article of importance in its field

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' below. If your reply is yes to any, please give details below