Reviewer’s report

Title: Body fatness and breast cancer risk in women of African ancestry

Version: 2 Date: 11 June 2013

Reviewer: Dagfinn Aune

Reviewer’s report:

Dear author

The authors report results from a large and well conducted population-based case-control study on body fatness and breast cancer risk in African American women from New York and New Jersey. The study included 978 cases and 958 controls. As there have been few studies published previously in AA women the study attempts to fill that of knowledge. I have only a few minor comments below.

Discretionary Revisions

There was no clear association between BMI and breast cancer risk. Results in postmenopausal women were tending toward a slight non-significant increase in risk when using self-reported weight one year before the reference date (OR=1.46, 0.87-2.44) compared with when using measured weight at the reference date (OR=1.00, 0.58-1.72). For current BMI the authors have further subdivided the obese in class 1,2 and 3 obesity. Were there any significant associations if doing the same for BMI using weight measured 1 year before the reference date?

A positive association was observed for waist and hip circumference and breast cancer in pre-menopausal women, after adjustment for BMI, but not without BMI adjustment. A non-significant positive association was observed between WHR and BC risk in postmenopausal women. None of the body composition measures were significantly associated with BC risk. When limiting the analysis to non-HRT users the risk estimates were similar.

Major compulsory Revisions:

Did the authors check if adjustment for any dietary variables influenced the results for BMI?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests