Reviewer’s report

Title: Association between polymorphisms in RMI1, TOP3A, and BLM and risk of cancer: a case-control study

Version: 2 Date: 6 April 2009

Reviewer: Darryl Shibata

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The paper by Broberg et al provides data that suggests that specific polymorphisms in BLM or TOP3A increase the risks for breast cancer. The major weakness as noted by the two reviewers is the small sample sizes. Another concern is that the "at risk" SNPs have no obvious functional consequences. Historically, these two flaws have usually lead to false leads. Nevertheless, the study appears well done within its limitations, and two of the three reviewers recommend publication. The BLM pathway is important in DNA integrity and therefore the current data are of interest because of the obvious links between DNA repair and cancer. Therefore, I think the paper merits publication in BMC Cancer.

I have no financial or non-financial competing interests in relation to this manuscript.