Author's response to reviews

Title: Association Between Frequent Use of Nonsteroidal Anti-Inflammatory Drugs and Breast Cancer

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Author’s response to reviews:

Dr. Iratxe Puebla
Senior Assistant Editor

Dear Dr. Puebla:

We greatly appreciate the decision to publish our paper "Association Between Frequent Use of Nonsteroidal Anti-Inflammatory Drugs and Breast Cancer" in BMC Cancer.

Following please find our reply to the reviewer's comment.

Yours truly,

Elham Rahme, PhD

Reviewer: Randall E Harris

Comment: A bit more detail in the explanation of the secondary analysis may be in order, vis a vis., the lack of internal consistency with the primary analysis due to the smaller sample size, or are there other reasons for the diminished estimates? Also, do the estimates of relative risk due to coxibs change in the secondary analysis compared to the first?

Author's reply: The effects on breast cancer of nsNSAIDs and/or COX-2 inhibitors, acetaminophen and aspirin at an average daily dose [less than or equal to] 100 mg were similar between the primary and secondary analyses. In contrast with the findings of the primary analysis, exposure to [greater than or equal to] 90 days of aspirin at an average daily dose >100mg (0.93, 0.72-1.18) did not seem to be associated with breast cancer in the subgroup of women who had a mammography in years 2-3 prior to the index date. It is difficult to conclude if this difference is due to chance given the multiple modeling conducted in this study or to differences in the characteristics of the women in the two analyses. In particular, in the primary analysis, only 25% (54/211) of the cases who received aspirin for 90 days or more at an average daily dose >100mg also received hormone replacement therapy compared to 42% (45/93) of those in the secondary analysis. Thus, there may have been better surveillance of the women in the secondary analysis. Of note, the effect of aspirin at an average daily dose >100mg in the subgroup analysis differed between women who were not receiving hormone replacement therapy (0.83 (0.60, 1.15)) and those who did (1.08 (0.74, 1.56)). We have now added this information to the text on page 11.