Alcohol Consumption and Survival after Breast Cancer

In Response: We read with interest the letter from Franceschi et al. presenting their findings on alcohol and mortality after breast cancer as a follow-up to our recent article. Our study sought to determine the effect of prediagnostic alcohol consumption, an established breast cancer etiologic risk factor, on the risk of mortality after breast cancer in women diagnosed before age 45 years. In our study, those who consumed alcohol, particularly wine, were at a lower risk of mortality after diagnosis compared with women who did not consume alcohol.

One major design difference between our study and that of Franceschi was the targeted age range. The study by Franceschi included women ages 23 to 74 years, whereas ours was restricted to women under age 45 years at breast cancer diagnosis. As we previously noted (1), differences in effects observed for some factors in relation to the development of premenopausal (or younger onset) and postmenopausal (older onset) breast cancer have led most recent epidemiologic studies to pursue age- or menopausal status–specific analyses. In addition, the clear variation in tumor profiles and breast cancer mortality by age such that younger women have more aggressive tumors and substantially higher mortality (2), suggests that it could be similarly important to investigate the effects of prediagnostic factors on mortality stratified by age or menopausal status. The differences in age ranges may have contributed to the differences in our findings.

Another key difference between our studies was that the reduced risk of dying we observed in relation to alcohol consumption changed little after adjusting for stage, histologic grade, treatment, and estrogen receptor/progesterone receptor status, whereas Franceschi et al. (3) observed a weakening of any association between alcohol and mortality after adjusting for tumor features. We further assessed our own results by mimicking the model reported by Franceschi et al. (3) and found that adjustment for stage, estrogen receptor/progesterone receptor status, age, and diagnosis year produced little change; the reduced risk of mortality was still observed for women consuming alcohol overall [hazard ratio (HR), 0.6; 95% confidence interval (95% CI), 0.5-0.8] and for wine consumption [HR of 0.7 (95% CI, 0.6-0.9)]. Thus, we do not feel that the differences in our findings can be explained away by social class. In their study population is not related to social class, facilitating the assessment of the role of wine consumption in the relative absence of potential confounding due to social class. We were able to investigate the effects of social class, as defined through education and income, on the relationship between wine consumption and mortality but did not find it to alter our prior results. Although wine consumption was associated with income and education level (the proportion of women consuming wine increased with higher income and education level; P < 0.001 for each), the association between wine and reduced mortality persisted after adjustment for income and education in addition to age, diagnosis year, and mammography [HR, 0.7 (95% CI, 0.6-0.9)], as well as in a fuller model with adjustment for income, education, age, diagnosis year, mammography, histology, stage, and treatment [HR, 0.7 (95% CI, 0.5-0.9)]. Thus, we do not feel that the association between wine and reduced mortality observed in our data can be explained away by social class.

In closing, this is an understudied topic, and thus, we appreciate Franceschi et al. describing their findings with respect to alcohol and mortality in their breast cancer cohort in an expanded version of their 2008 paper (5).

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Disclosure of Potential Conflicts of Interest
No potential conflicts of interest were disclosed.
References


Alcohol Consumption and Survival after Breast Cancer
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