

An Unexpected Excess of Breast Cancer among Young U.S. Asian Women

P. Reynolds, S. Hurley, D. Goldberg, R. Rull, T. Quach, J. Von Behren
Northern California Cancer Center, Berkeley, CA

The objective of this analysis was to compare the risk of breast cancer among young African American (AA) and Asian/Pacific Islander (API) women to white women, all of whom were born in California during the 1960s. Invasive breast cancer cases diagnosed in California 1988-2004 were identified from the California Cancer Registry (CCR). Probabilistic record linkage was used to link breast cancer cases to their California birth records. Population controls were selected from California birth records, frequency matched to cases 2:1 on year of birth. Race/ethnicity was abstracted from the birth certificates. Odds ratios (ORs) and 95% confidence intervals (95% CI) were estimated using unconditional logistic regression. Analysis was conducted on 3,799 cases of breast cancer and 8,789 controls. Our study population was very young (age range for cases = 22 to 44 years) and predominantly white (87%) but included substantial numbers of AA (n=1,207) and API (n=422) women. Compared to young white women, AA women (OR=1.6, 95% CI: 1.4 – 1.9) and API women (OR = 1.3, 95% CI: 1.1 – 1.6) had higher risks of breast cancer. Among API women, the risks were highest among women of Japanese descent (OR=1.5, 95% CI 1.1 – 2.1). Our finding of an elevated risk of breast cancer among young API women contradicts the lower incidence rates among women of this age group reported by national surveillance data. This may be due to the fact that a large proportion of API women in the U.S. are foreign-born while all the women in this study were California-born. Our findings suggest the need for further study of breast cancer risk among young API women and underscore the need to take into account nativity in such evaluations. Breast cancer disparities in this rapidly-growing population may serve to inform cancer control efforts.