End Results (SEER) program database with data from nine cancer registries (5), and the trend analysis began in 1975 for women 20–29 years of age, in 1980 for women 30–39 years of age, and in 1990 for women 40–49 years of age (2). Brinton et al. based their analyses on a SEER database with data from 13 cancer registries (6), and thus their trend analyses for women aged 50 years and older, 40–49 years, and younger than 40 years all began in 1992, the first year with data from the expanded database.

The trend analysis for women 40–49 years of age by Brinton et al. (1) shows a decrease in incidence rates over time, which is consistent with the earlier analysis over a similar time period (2). The trend analysis for women younger than 40 years by Brinton et al. (1) does not provide evidence of the decrease in rates observed in the prior analyses over much longer time periods for women both 20–29 and 30–39 years of age (2). Examination of the auxiliary figures in supplementary online material included with the previous publication (2), however, indicates that most of the decrease in incidence rates for invasive breast cancer in both age groups among women younger than 40 years occurred before 1992 and that rates were relatively flat thereafter. The absence of a decreasing trend for invasive breast cancer incidence rates after 1992 among women 20–29 and 30–39 years of age is difficult to interpret in terms of breast cancer risk because the auxiliary figures demonstrate marked increases in rates of in situ breast cancer after 1992 for both age groups, consistent with increasing use of mammography among young women (2). Thus, greater detection may have inflated their incidence rates for invasive breast cancer after 1992, causing rates to increase even if the risk of breast cancer did not.

The decrease in birth cohort risk of breast cancer after 1946 among US women younger than 50 years has been demonstrated using age–period–cohort analyses of breast cancer mortality rates (3,4). Because the decreasing trend is a birth cohort phenomenon, the decrease begins in different calendar years for different age groups. Thus, the prior study used a National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) program database with data from nine cancer registries (5), and the trend analysis began in 1975 for women 20–29 years of age, in 1980 for women 30–39 years of age, and in 1990 for women 40–49 years of age (2). Brinton et al. based their analyses on a SEER database with data from 13 cancer registries (6), and thus their trend analyses for women aged 50 years and older, 40–49 years, and younger than 40 years all began in 1992, the first year with data from the expanded database.

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The decrease in birth cohort risk of breast cancer after 1946 among US women younger than 50 years has been observed consistently in age–period–cohort analyses of both mortality rates and incidence rates (3,4,7). Brinton et al. (1) conjecture that birth cohort trends for breast cancer in young women may reflect secular patterns of risk factors (eg, obesity and parity) that have opposite effects on breast cancer risk in pre- and postmenopausal women. A recent age–period–cohort analysis of breast cancer incidence rates through 2000 among white US women confirms the presence of a decrease in birth cohort slope after 1946 for those younger than 50 years and also shows preliminary evidence of a decrease in the birth cohort slope for those aged 50 years and older after 1946 (7). Confirmation of the recent decreasing birth cohort trend in older women will be required using additional years of rates, but the results of this analysis are clearly not consistent with a reversal in older women of the decreasing birth cohort trend documented among US women younger than 50 years (7).

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References

Notes
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