

## Supplementary Figure.

Sex-specific maximum likelihood estimates of 5-year birth cohort effects for an age-period-cohort model fit to cutaneous melanoma incidence data for Caucasians in the SEER Program from 1973 through 2004. The vertical line at 1965 on the x-axis of the plot for women represents the point at which there is an apparent change in the slope of cohort effects. *Note regarding interpretation of plot:* interpretation of individual birth cohort effect estimates is difficult because the parameters are not identifiable (i.e., there is not a unique set of estimates). However, a change in the slope of a birth cohort effects curve is indicative of a change in the magnitude of disease rates. An increase (or decrease) in the slope of the birth cohort effects curve indicates a worsening (or moderation) in the birth-cohort pattern of risk. Changes in birth cohort effects for cancer incidence rates are indicative of changes in disease risk factor prevalence across birth cohorts.

