

Table 4.3  
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Ages 50+ by Race/Ethnicity

|  | JP Trend 1 |       | JP Trend 2 |       | JP Trend 3 |       | JP Trend 4 |       | JP Trend 5 |       | JP Trend 6 |      | AAPC <sup>d</sup> |         |
|--|------------|-------|------------|-------|------------|-------|------------|-------|------------|-------|------------|------|-------------------|---------|
|  | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC  | 1999-08           | 2004-08 |
| <u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>  |            |       |            |       |            |       |            |       |            |       |            |      |                   |         |
| All Races  | 1975-82    | 0.9   | 1982-87    | 5.4*  | 1987-93    | -0.3  | 1993-99    | 1.9*  | 1999-05    | -2.6* | 2005-08    | 0.7  | -1.5*             | -0.1    |
| White  | 1975-82    | 0.9*  | 1982-87    | 5.5*  | 1987-93    | -0.3  | 1993-00    | 1.7*  | 2000-04    | -3.8* | 2004-08    | -0.2 | -1.6*             | -0.2    |
| Black  | 1975-92    | 2.6*  | 1992-08    | 0.2   |            |       |            |       |            |       |            |      | 0.2               | 0.2     |
| <u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u> |            |       |            |       |            |       |            |       |            |       |            |      |                   |         |
| All Races  | 1992-99    | 1.6*  | 1999-05    | -2.6* | 2005-08    | 1.0   |            |       |            |       |            |      | -1.4*             | 0.1     |
| White  | 1992-00    | 1.5*  | 2000-04    | -3.8* | 2004-08    | 0.0   |            |       |            |       |            |      | -1.5*             | 0.0     |
| Black  | 1992-08    | 0.2   |            |       |            |       |            |       |            |       |            |      | 0.2               | 0.2     |
| <u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>        |            |       |            |       |            |       |            |       |            |       |            |      |                   |         |
| All Races  | 1975-82    | 0.9   | 1982-87    | 5.3*  | 1987-93    | -0.3  | 1993-99    | 1.9*  | 1999-05    | -2.7* | 2005-08    | 0.5  | -1.6*             | -0.3    |
| White  | 1975-82    | 0.9*  | 1982-87    | 5.5*  | 1987-93    | -0.3  | 1993-00    | 1.7*  | 2000-04    | -3.8* | 2004-08    | -0.4 | -1.7*             | -0.4    |
| Black  | 1975-92    | 2.6*  | 1992-08    | 0.1   |            |       |            |       |            |       |            |      | 0.1               | 0.1     |
| <u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>       |            |       |            |       |            |       |            |       |            |       |            |      |                   |         |
| All Races  | 1992-99    | 1.7*  | 1999-04    | -2.9* | 2004-08    | 0.0   |            |       |            |       |            |      | -1.6*             | 0.0     |
| White  | 1992-00    | 1.4*  | 2000-04    | -3.9* | 2004-08    | -0.2  |            |       |            |       |            |      | -1.6*             | -0.2    |
| White NH <sup>ef</sup>   | 1992-01    | 1.3*  | 2001-04    | -5.4  | 2004-08    | 0.2   |            |       |            |       |            |      | -1.4              | 0.2     |
| Black  | 1992-08    | 0.1   |            |       |            |       |            |       |            |       |            |      | 0.1               | 0.1     |
| Black NH <sup>ef</sup>   | 1992-08    | 0.1   |            |       |            |       |            |       |            |       |            |      | 0.1               | 0.1     |
| API <sup>e</sup>   | 1992-94    | -5.5  | 1994-97    | 7.9   | 1997-05    | -1.0  | 2005-08    | 3.2   |            |       |            |      | 0.3               | 2.1     |
| AI/AN <sup>eg</sup>  | 1992-08    | -0.7  |            |       |            |       |            |       |            |       |            |      | -0.7              | -0.7    |
| Hispanic <sup>f</sup>  | 1992-08    | 0.1   |            |       |            |       |            |       |            |       |            |      | 0.1               | 0.1     |
| <u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>            |            |       |            |       |            |       |            |       |            |       |            |      |                   |         |
| All Races  | 1975-90    | 0.6*  | 1990-08    | -2.0* |            |       |            |       |            |       |            |      | -2.0*             | -2.0*   |
| White  | 1975-90    | 0.5*  | 1990-08    | -2.1* |            |       |            |       |            |       |            |      | -2.1*             | -2.1*   |
| Black  | 1975-93    | 1.6*  | 1993-08    | -1.2* |            |       |            |       |            |       |            |      | -1.2*             | -1.2*   |
| <u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>            |            |       |            |       |            |       |            |       |            |       |            |      |                   |         |
| All Races  | 1992-95    | -1.1* | 1995-98    | -3.3* | 1998-03    | -1.5* | 2003-08    | -2.1* |            |       |            |      | -1.8*             | -2.1*   |
| White  | 1992-94    | -0.6  | 1994-97    | -3.3* | 1997-08    | -1.9* |            |       |            |       |            |      | -1.9*             | -1.9*   |
| White NH <sup>ef</sup>   | 1992-94    | -0.5  | 1994-97    | -3.4* | 1997-08    | -1.7* |            |       |            |       |            |      | -1.7*             | -1.7*   |
| Black  | 1992-08    | -1.1* |            |       |            |       |            |       |            |       |            |      | -1.1*             | -1.1*   |
| Black NH <sup>ef</sup>   | 1992-08    | -0.9* |            |       |            |       |            |       |            |       |            |      | -0.9*             | -0.9*   |
| API <sup>e</sup>   | 1992-08    | -0.3  |            |       |            |       |            |       |            |       |            |      | -0.3              | -0.3    |
| AI/AN <sup>eg</sup>  | 1992-08    | 0.3   |            |       |            |       |            |       |            |       |            |      | 0.3               | 0.3     |
| Hispanic <sup>f</sup>  | 1992-08    | -1.6* |            |       |            |       |            |       |            |       |            |      | -1.6*             | -1.6*   |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero ( $p < .05$ ).

- Joinpoint regression line analysis could not be performed on data series.