

Table 4.2  
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,  
1975-2016 With up to Five Joinpoints, 2000-2016 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	2007-16	2012-16
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2016</u>														
All Races	1975-80	-1.3	1980-87	2.7*	1987-94	-0.8	1994-16	0.3*					0.3*	0.3*
White	1975-80	-1.1	1980-87	2.7*	1987-94	-0.8	1994-16	0.3*					0.3*	0.3*
Black	1975-90	1.3*	1990-16	0.0									0.0	0.0
<u>SEER 21 Delay-Adjusted Incidence<sup>b</sup>, 2000-2016</u>														
All Races	2000-16	0.4*											0.4*	0.4*
White	2000-16	0.3*											0.3*	0.3*
White NH <sup>ef</sup>	2000-16	0.5*											0.5*	0.5*
Black	2000-16	0.6*											0.6*	0.6*
Black NH <sup>ef</sup>	2000-16	0.6*											0.6*	0.6*
API <sup>e</sup>	2000-16	1.3*											1.3*	1.3*
AI/AN <sup>eg</sup>	2000-16	-0.6											-0.6	-0.6
Hispanic <sup>f</sup>	2000-16	0.5*											0.5*	0.5*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2016</u>														
All Races	1975-90	-0.4*	1990-07	-3.2*	2007-16	-1.2*							-1.2*	-1.2*
White	1975-90	-0.6*	1990-05	-3.6*	2005-16	-1.4*							-1.4*	-1.4*
Black	1975-89	1.6*	1989-16	-2.2*									-2.2*	-2.2*
<u>U.S. Cancer Mortality<sup>c</sup>, 2000-2016</u>														
All Races	2000-08	-2.9*	2008-16	-1.2*									-1.4*	-1.2*
White	2000-07	-3.1*	2007-16	-1.2*									-1.2*	-1.2*
White NH <sup>ef</sup>	2000-07	-3.0*	2007-16	-1.3*									-1.3*	-1.3*
Black	2000-16	-2.3*											-2.3*	-2.3*
Black NH <sup>ef</sup>	2000-16	-2.1*											-2.1*	-2.1*
API <sup>e</sup>	2000-08	-5.2*	2008-16	1.1									0.4	1.1
AI/AN <sup>eg</sup>	2000-16	-1.7											-1.7	-1.7
Hispanic <sup>f</sup>	2000-16	-1.6*											-1.6*	-1.6*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<https://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).

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

<sup>b</sup> Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

<sup>c</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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

<sup>f</sup> 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.

<sup>g</sup> Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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