Table 4.2 Cancer of the Female Breast (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program, 1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four 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 ^d	
Name		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-13	2009-13
Name	SEER 9 Delay-Adjusted Incidence ^a 1975-2013														
Saleck 1975-91 1.3° 1991-13 0.2°					2.7*	1987-94	-0.8	1994-13	0.3*					0.3*	0.3*
Reace 1975-94 1.3° 1991-13 0.2°														0.3*	
Races	Black	1975-91		1991-13										-0.2	
Name	SEER 13 Delay-Adju	sted Incid													
Black 1992-02 -1.3* 2002-05 4.1 2005-13 -0.9 -0.4 -0.9	All Races	1992-13	0.2*	.										0.2*	0.2*
All Races	White	1992-13	0.2*											0.2*	0.2*
All Races	Black	1992-02	-1.3*	2002-05	4.1	2005-13	-0.9							-0.4	-0.9
March 1975-80 -1.1 1980-87 2.6* 1987-94 -0.8 1994-13 0.2* 0	SEER 9 Observed In	ncidenceª, 1	L975-2013	3											
Black 1975-91 1.3* 1991-13 -0.3	All Races	1975-80	-1.4	1980-85	3.1*	1985-13	0.1							0.1	0.1
All Races 1992-13 0.2* 0.2* 0.2* White 1992-13 0.1* 0.	White	1975-80	-1.1	1980-87	2.6*	1987-94	-0.8	1994-13	0.2*					0.2*	0.2*
All Races 1992-13 0.2* White NHeff 1992-13 0.1* White NHeff 1992-13 0.1* Black 1992-02 -1.3* 2002-05 4.1 2005-13 -1.2* Black NHeff 1992-02 -1.4* 2002-05 4.5 2005-13 -1.0 API 1992-13 0.9* AI/AN 1992 13 0.9* AI/AN 1992-13 0.3 Hispanicf 1992-13 0.1 U.S. Cancer Mortality 1992-13 0.1 U.S. Cancer Mortality 1992-03 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1995-90 -0.4: 1990-05 -1.1* 1995-13 -2.4* U.S. Cancer Mortality 1902-05 -1.1* 2005-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White 1992-04 -3.7* 2004-13 -1.8* Black 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NHeff 1992-04 -3.7* 2004-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.4* API 1992-13 -2.4* API 1992-13 -2.4* API 1992-13 -2.4* API 1992-13 -2.4*	Black	1975-91	1.3*	1991-13	-0.3									-0.3	-0.3
White NHefe 1992-13 0.1* White NHefe 1992-13 0.4* White NHefe 1992-02 -1.3* 2002-05 4.1 2005-13 -1.2* Black 1992-02 -1.4* 2002-05 4.5 2005-13 -1.0 APIe 1992-13 0.9* AI/ANPS 1992-13 0.0* AI/ANPS 1992-13 0.1 U.S. Cancer Mortalityc, 1975-2013 All Races 1975-90 -0.4* 1990-07 -3.2* 2007-13 -1.3* White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1995-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortalityc, 1992-13 -3.1* U.S. Cancer Mortalityc, 1992-13 -1.3* White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1995-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortalityc, 1992-13 -3.1* All Races 1992-07 -3.1* 2007-13 -1.3 -2.4* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.2* APIe 1992-13 -2.4* AI/ANPS 1992-13 -2.1*	SEER 13 Observed I	ncidence ^b ,	1992-201	.3											
White NHef 1992-13 0.4* 0.4* Black 1992-02 -1.3* 2002-05 4.1 2005-13 -1.2* -0.6 -1.2* Black NHef 1992-02 -1.4* 2002-05 4.5 2005-13 -1.0 -0.4 -1.0 APIe 1992-13 0.9* 0.9* 0.9* 0.9* AI/ANFg 1992-13 -0.3 -0.3 -0.3 -0.3 -0.3 Hispanicf 1992-13 0.1 1995-2013 -0.4* 1995-2013 -0.3 <	All Races	1992-13	0.2*											0.2*	0.2*
Black 1992-02 -1.3* 2002-05 4.1 2005-13 -1.2* Black NHef 1992-02 -1.4* 2002-05 4.5 2005-13 -1.0 APTe 1992-13 0.9* AI/ANeg 1992-13 -0.3 Hispanicf 1992-13 0.1 U.S. Cancer Mortalityc, 1975-2013 All Races 1975-90 -0.4* 1990-07 -3.2* 2007-13 -1.3* White 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortalityc, 1992-2013 All Races 1992-04 -3.7* 2004-13 -1.8* Black 1992-04 -3.7* 2004-13 -1.8* White 1992-04 -3.7* 2004-13 -1.8* Black 1992-13 -2.3* Black 1992-13 -2.2* APIe 1992-13 -2.2* APIe 1992-13 -2.2* APIe 1992-13 -2.4* APIe 1992-13 -2.1*	White	1992-13	0.1*											0.1*	0.1*
Black NHef 1992-02 -1.4* 2002-05 4.5 2005-13 -1.0 APTe 1992-13 0.9* 0.9* 0.9* AI/ANeg 1992-13 -0.3 AIspanicf 1992-13 0.1 U.S. Cancer Mortalityc, 1975-2013 All Races 1975-90 -0.4* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortalityc, 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3* White 1992-04 -3.7* 2004-13 -1.8* White NHef 1992-04 -3.7* 2004-13 -1.8* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* APTe 1992-13 -2.4* AI/ANeg 1992-13 -2.1*	White NH ^{ef}	1992-13	0.4*											0.4*	0.4*
APT ^e 1992-13 0.9* AI/AN ^{eg} 1992-13 -0.3 Hispanic ^f 1992-13 0.1 U.S. Cancer Mortality ^c , 1975-2013 All Races 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortality ^c , 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3* White 1992-04 -3.7* 2004-13 -1.8* Black 1992-07 -3.1* 2007-13 -1.8* White 1992-04 -3.7* 2004-13 -1.8* Black 1992-07 -3.1* 2007-13 -1.8* White 1992-04 -3.7* 2004-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.2* APT ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	Black	1992-02	-1.3*	2002-05	4.1	2005-13	-1.2*							-0.6	-1.2*
AI/ANeg 1992-13 -0.3 Hispanic 1992-13 0.1 U.S. Cancer Mortality, 1975-2013 All Races 1975-90 -0.4* 1990-07 -3.2* 2007-13 -1.3* White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortality, 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-00 -4.1* 2007-13 -1.3 White 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.2* API 1992-13 -2.2* AI/ANeg 1992-13 -2.1*	Black NH ^{ef}	1992-02	-1.4*	2002-05	4.5	2005-13	-1.0							-0.4	-1.0
Hispanic ^f 1992-13 0.1 U.S. Cancer Mortality ^c , 1975-2013 All Races 1975-90 -0.4* 1990-07 -3.2* 2007-13 -1.3* White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortality ^c , 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	API ^e	1992-13	0.9*											0.9*	0.9*
U.S. Cancer Mortality ^c , 1975-2013 All Races 1975-90 -0.4* 1990-07 -3.2* 2007-13 -1.3* White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortality ^c , 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	AI/AN ^{eg}	1992-13	-0.3											-0.3	-0.3
All Races 1975-90 -0.4* 1990-07 -3.2* 2007-13 -1.3* White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortality ^c , 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	Hispanic ^f	1992-13	0.1											0.1	0.1
White 1975-90 -0.6* 1990-04 -3.7* 2004-13 -1.8* Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* U.S. Cancer Mortality ^c , 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	U.S. Cancer Mortality ^c , 1975-2013														
Black 1975-87 1.8* 1987-95 -1.1* 1995-13 -2.4* <u>U.S. Cancer Mortality^c, 1992-2013</u> All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	All Races	1975-90	-0.4*	1990-07	-3.2*	2007-13	-1.3*							-1.9*	-1.3*
U.S. Cancer Mortality ^c , 1992-2013 All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	White	1975-90	-0.6*	1990-04	-3.7*	2004-13	-1.8*							-1.8*	-1.8*
All Races 1992-07 -3.1* 2007-13 -1.3 White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	Black	1975-87	1.8*	1987-95	-1.1*	1995-13	-2.4*							-2.4*	-2.4*
White 1992-04 -3.7* 2004-13 -1.8* White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	U.S. Cancer Mortal	ity ^c , 1992-	-2013												
White NH ^{ef} 1992-00 -4.1* 2000-13 -2.3* Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	All Races	1992-07	-3.1*	2007-13	-1.3									-2.0*	-1.3
Black 1992-13 -2.3* Black NH ^{ef} 1992-13 -2.2* API ^e 1992-13 -2.4* AI/AN ^{eg} 1992-13 -2.1*	White	1992-04	-3.7*	2004-13	-1.8*									-1.8*	-1.8*
Black NH ^{ef} 1992-13 -2.2* -2.2* API ^e 1992-13 -2.4* -2.4* AI/AN ^{eg} 1992-13 -2.1* -2.1*	White NH ^{ef}	1992-00	-4.1*	2000-13	-2.3*									-2.3*	-2.3*
API ^e 1992-13 -2.4* -2.4* AI/AN ^{eg} 1992-13 -2.1* -2.1*	Black	1992-13	-2.3*											-2.3*	-2.3*
AI/AN ^{eg} 1992-13 -2.1* -2.1*	Black NH ^{ef}	1992-13	-2.2*											-2.2*	-2.2*
	API ^e	1992-13	-2.4*											-2.4*	-2.4*
Hispanic ^f 1992-13 -2.5* -2.5*	AI/AN ^{eg}	1992-13	-2.1*											-2.1*	-2.1*
	Hispanic ^f	1992-13	-2.5*											-2.5*	-2.5*

Joinpoint Regression Program Version 4.3.0.0, April 2016, 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.

d 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 New Hampshire and Oklahoma.

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.