



## ***Population-based incidence and prognostic factor patterns for IBC***

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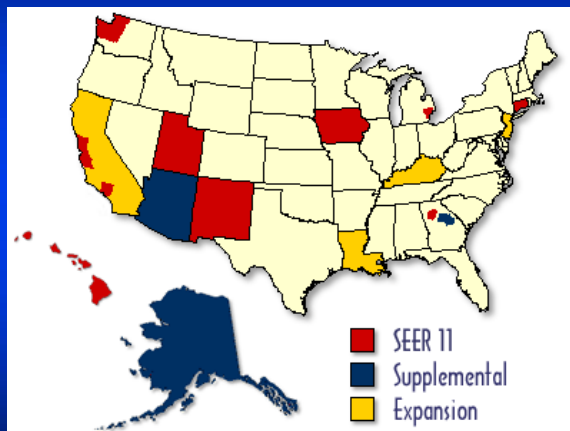
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DHHS/NIH/NCI/Division of Cancer Prevention  
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# **NCI's SEER database, 1973-2001**

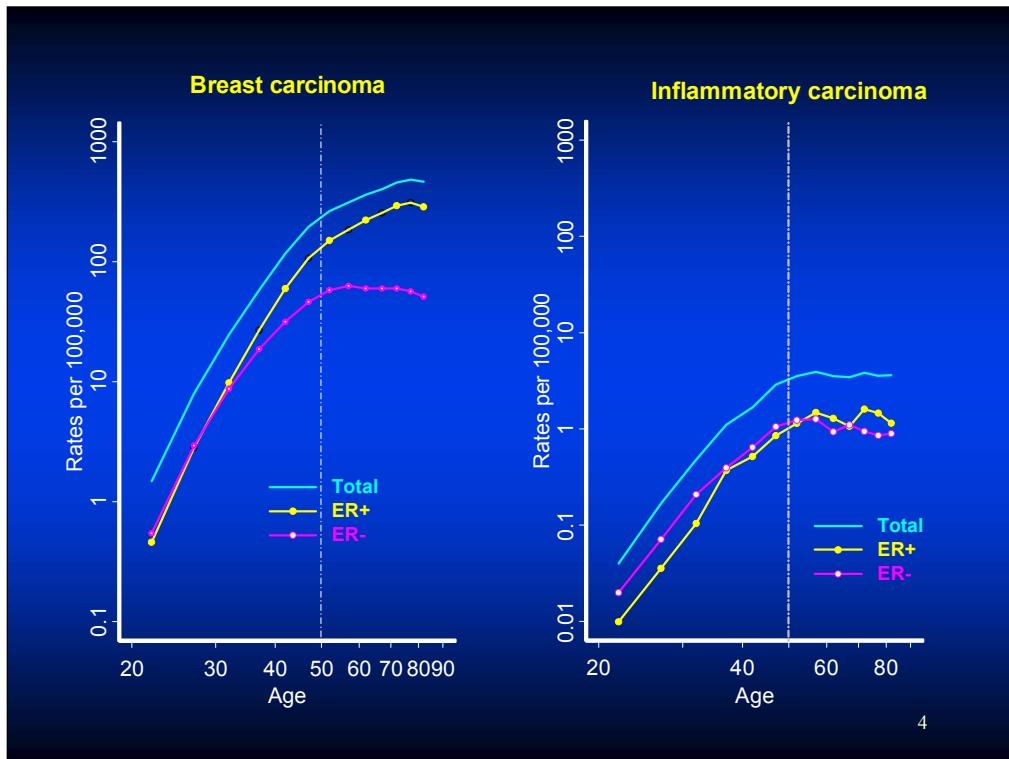
**(3½ million new cancer cases with ≈ 500,000 breast cases)**

<b>SEER 11 + Alaska</b>
<b>Atlanta</b>
<b>Connecticut</b>
<b>Detroit</b>
<b>Hawaii</b>
<b>Iowa</b>
<b>Los Angeles</b>
<b>New Mexico</b>
<b>San Francisco-Oakland</b>
<b>San Jose-Monterey</b>
<b>Seattle-Puget Sound</b>
<b>Utah</b>
<b>Alaska</b>



## **Inflammatory breast cancer (IBC) by ethnicity**

<b>Race</b>	<b>All cases</b>		<b>IBC</b>	
	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
<b>White</b>	202,824	83.6%	2,488	81.1%
<b>Black</b>	20,320	8.4%	387	12.6%
<b>AI/AN</b>	1,097	0.5%	27	0.9%
<b>API</b>	16,956	7.0%	164	5.3%
<b>Unknown</b>	1,352	0.6%	3	0.1%
<b>Total</b>	242,549	100.0%	3,069	100.0%



Age-specific breast carcinoma incidence rates for all breast cases combined (*shown in light blue*) increase rapidly until age 50 years then continue to rise at a slower rate, implying that key carcinogenic events occur before rather than after menopause.

Breast carcinoma rates stratified by ER expression diverge into two components. Rates for ER-positive tumors (*shown in yellow*) increase rapidly until age 50 years then rise more slowly, similar to overall rates. Rates for ER-negative tumors (*shown in pink*) increase until age 50 years then flatten. Rates that flatten after age 50 years imply that menopause has greater impact upon ER-negative than upon ER-positive breast carcinoma.

Similar to ER-negative rates for all breast carcinoma cases combined, rates for IBC flatten after menopause irrespective of their own ER expression

Similar rates suggest similar etiology

- ❑ Rapid decrease in survival for IBC between 2-3 years after diagnosis, corresponding to a sharp peak in the hazard function
- ❑ 50% survival at approximately 40 months
- ❑ 8-10 years following diagnosis survival for IBC  $\approx$  all other breast cancer cases

### Breast cancer survival

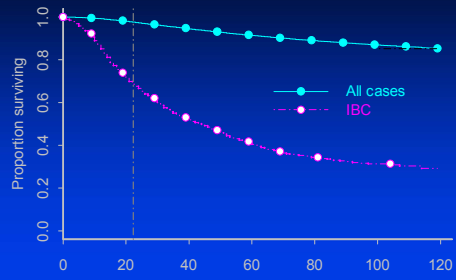
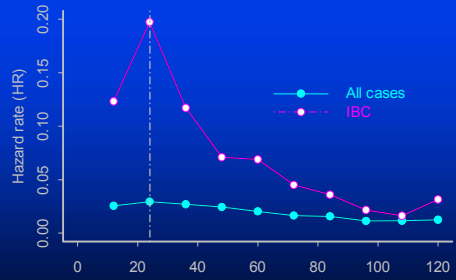


Figure a: Time in months  
Hazard function



## ***Conclusion***

- ❑ IBC is a rare breast cancer in SEER,  $\approx$  1-2 %
- ❑ Ethnic disparity, more common in Blacks than Whites
- ❑ Unique incidence and prognostic patterns
  1. Flat rates after menopause suggest an important role for etiologic events operating early in reproductive life
  2. Sharp hazard peak between 2-3 years, and then survival is similar to all other breast cancers