

**eTable 1. Cohort Selection Criteria**

<b>Step</b>	<b>Description</b>	<b>Number of patients</b>	<b>Number excluded</b>
1	Individuals age 66 and older diagnosed with breast cancer in SEER-Medicare data between 2000 to 2008	196887	
2	Female sex	195217	1670
3	Exclude if histology not consistent with epithelial origin	187011	8206
4	Exclude if pure lobular carcinoma in situ	185345	1666
5	Exclude if prior cancer	145299	40046
6	Exclude if not pathologically confirmed	145131	168
7	Include only if continuous fee-for-service Medicare coverage from 12 months prior to 24 months after diagnosis	118556	26575
8	Include if tumor size $\leq$ 5 cm	71904	46652
9	Include if Tis-T2	67980	3924
10	Include if N0 or N1	58377	9603
11	Exclude if distant metastasis at diagnosis or if bilateral	58272	105
12	Exclude if second cancer diagnosed within 24 months	58204	68
13	Exclude if radiation given prior to surgery	58044	160
14	Include only if treated with one of the 5 local therapy strategies	55327	2717

Abbreviations: SEER (Surveillance, Epidemiology, and End Results)

**eTable 2. Codes used to define procedures and diagnoses**

	ICD-9 Diagnosis	CPT	ICD-9 Procedure
<b>Lumpectomy</b>		19112, 19110, 19120, 19125, 19126, 19160, 19162, 19301, 19302	85.12, 85.2, 85.20-85.25
<b>Mastectomy</b>		19180, 19182, 19200, 19220, 19240, 19303, 19304, 19305, 19306, 19307	85.33-85.48, including 85.4
<b>Reconstruction of any type</b>		19361, 19364, 19366, 19367, 19368, 19369, 19340, 19342, 19357, 19350, 19366, 19350	85.53, 85.54, 85.33, 85.35, 85.95, 85.70, 85.71, 85.72, 85.73, 85.74, 85.75, 85.76, 85.7, 85.79, 85.86, 85.82, 85.83, 85.84, 85.85, 85.89, 85.86, 85.93, 85.96
<b>Chemotherapy</b>	V58.1, V66.2, V67.2	96400-96549, J9000-J9999 (excluding: J9003, J9165, J9175, J9202, J9209, J9212-J9226, J9240, J9395), Q0083-Q0085, J8510, J8515, J8520, J8521, J8530, J8560, J8561, J8562, J8565, J8600, J8610, J8650, J8700, J8705, J8999, G0355, G0359, G0360, G0361, G0362	99.25
<b>External beam radiation</b>		77401-77416, 77418, G0174	92.21-92.26
<b>Brachytherapy</b>		77750-77799, 0182T	92.20, 92.27, 92.28

Abbreviations: CPT (Common Procedural Terminology), ICD (International Classification of Diseases)