

Sister Study Breast Cancer Events (any type) ¹ and Characteristics: Data Release 8.1 ²

Characteristic	N	% of cohort
Total Cases	3,804	7.5
Breast Cancer Subtype for 1st Diagnosis	N	% of cases
Invasive ³	2,863	75.3
Ductal only (no lobular component) ⁴	2,007	52.8
Lobular only (no ductal component) ⁴	251	6.6
Ductal and lobular ^{4,5}	185	4.9
Inflammatory ⁶	6	0.2
Paget's ⁷	10	0.3
Phyllodes ⁸	5	0.1
Other/unknown if ductal or lobular ⁹	399	10.5
<i>In situ</i>	908	23.9
Ductal only (no lobular component) ¹⁰	758	19.9
Lobular only (no ductal component) ¹⁰	118	3.1
Ductal and lobular ^{5,10}	17	0.4
Paget's ⁷	5	0.1
Other/unknown if ductal or lobular ¹¹	10	0.3
Invasiveness unknown ¹²	33	0.9
Stage at 1st Breast Cancer Diagnosis ¹³		
0	817	24.4
I	1,686	50.3
II	659	19.6
III	171	5.1
IV	21	0.6
<i>Unknown, missing, cannot stage</i>	450	
Estrogen Receptor (ER) Status for 1st Breast Cancer Diagnosis ¹³		
Positive	2,680	84.5
Negative	485	15.3
Borderline	5	0.2
<i>Unknown, missing, not performed</i>	634	
Progesterone Receptor (PR) Status for 1st Breast Cancer Diagnosis ¹³		
Positive	2,204	71.9
Negative	853	27.8
Borderline	7	0.2
<i>Unknown, missing, not performed</i>	740	
HER2 Amplification Status for 1st Breast Cancer Diagnosis ¹³		
Positive	342	13.1
Negative	2,238	85.5
Borderline	37	1.4
<i>Unknown, missing, not performed</i>	1,187	
Combined ER, PR, HER2 Status ¹³		
Triple negative	268	8.7
Not triple negative	2,806	91.3
<i>Unknown, missing, not performed</i>	730	

Characteristic	N (total = 3,804)	% of cases
Diagnosis Confirmation ¹⁴		
Medical	3,063	80.5
NDI Plus or death certificate only	39	1.0
None	702	18.5
Race/Ethnicity ¹⁵		
Non-Hispanic White	3,257	85.6
Non-Hispanic Black	295	7.8
Hispanic	142	3.7
Other	109	2.9
Missing	1	
Age (in years) at Breast Cancer Diagnosis ¹⁶		
Under 50	415	10.9
50-64	1,798	47.3
65 and older	1,591	41.8
Menopausal Status at Breast Cancer Diagnosis		
Pre-menopausal	641	16.9
Post-menopausal	3,147	83.1
Unknown	16	

Abbreviations: BrCa= Breast cancer; DCIS=Ductal carcinoma *in situ*; LCIS = Lobular carcinoma *in situ*; MR = Medical report (medical record and/or pathology report)

- ¹ Breast cancer events (any type) are defined by the following ICD10 codes: D05 (includes lobular carcinoma in situ, ductal carcinoma in situ, other and unspecified *in situ* breast carcinomas), C50 (all invasive breast cancer), and D48.6 (neoplasm of uncertain behavior of breast)
- ² Data release 8.1 includes events from follow-up phases that closed **on or before 9/23/2018**, excluding all data from participants who have withdrawn their data from the study (n=3). To be considered a breast cancer event, breast must be the primary site, and the cancer diagnosis must have occurred after the participant's baseline date. Consequently, Data Release 8.1 breast cancer events (any type) exclude a) through c) below:
 - a) Breast cancers diagnosed prior to participant's baseline date. [Total (n=111): Invasive ductal (n=31); invasive lobular (n=1), invasive ductal and lobular (n=1), invasive, unknown if ductal or lobular (n=5), DCIS (n=19), LCIS (n=53), and *in situ* unknown if ductal or lobular (n=1)];
 - b) Breast cancers diagnosed with unknown timing relative to baseline [Total (n=27): Invasive, unknown if ductal or lobular (n=10), DCIS (n=7), and LCIS (n=10)];
 - c) Unknown primary cancer diagnoses where breast was unlikely to be the primary site, but the possibility could not be ruled out (n=4)
- ³ Includes 'presumed invasive' (i.e. a carcinoma in situ with positive nodes)(n=1)
- ⁴ Ductal only, Lobular only, and Ductal and Lobular exclude inflammatory breast cancer and Paget's
- ⁵ Includes BrCa events with a) tumors with mixed ductal and lobular characteristics and/or b) multiple tumors of different histology (e.g. a ductal only tumor and a lobular only tumor)
- ⁶ Inflammatory – Ductal (n=5), Ductal and Lobular (n=1), Lobular (n=0)
- ⁷ Paget's - Invasive: Ductal (n=9), Lobular (n=1); *in situ*: Ductal (n=5), Lobular (n=0)
- ⁸ Phyllodes is neither ductal nor lobular; it is a sarcoma
- ⁹ Includes: a) Invasive but unknown if ductal or lobular (n=394), these are typically self-report without MR confirmation; b) Invasive type "neither ductal nor lobular, not otherwise specified" (n=4), these are typically self-report without MR confirmation; and c) Per MR, presumed invasive - *in situ* tumor, positive nodes (n=1)
- ¹⁰ *In situ* Ductal only, *in situ* Lobular only, and *in situ* Ductal and Lobular exclude Paget's
- ¹¹ Includes: a) *In situ* but unknown if ductal or lobular (n=7); b) *In situ* type "neither ductal nor lobular, not otherwise specified" (n=3); these are typically self-report without MR confirmation
- ¹² Invasiveness unknown includes: a) Unknown if invasive or *in situ* and unknown if ductal or lobular (n=20); b) Ductal but unknown if invasive or *in situ* (n=7); c) Lobular but unknown if invasive or *in situ* (n=1); d) Neither ductal nor lobular (other) but not otherwise specified and unknown if invasive or *in situ* (n=2); and e) Per MR, unable to determine if DCIS or atypical ductal hyperplasia (n=3)

- ¹³ Priority for stage and ER/PR/HER2 status when diagnosis is reported by multiple sources: Medical record > Breast Cancer Follow-Up Form
- ¹⁴ Medical confirmation of reported breast cancer is generally from medical records but may only include pathology report; National Death Index (NDI) Plus or death certificate confirmation is specific to cases that do not have medical confirmation
- ¹⁵ Race/ethnicity: precedence given to Hispanic ethnicity first, then Black race, then Other race, then White
- ¹⁶ For those missing age at diagnosis (n=21), age was imputed as the midpoint of the range of plausible ages at diagnosis