

Sister Study Breast Cancer Events (any type) ¹ and Characteristics: Data Release 11.0 ²

	N	% of cohort
Total Cases	4,732	9.3
Breast Cancer Subtype for 1st Diagnosis	N	% of cases
Invasive ³	3,649	77.1
Ductal only (no lobular component) ⁴	2,510	53.0
Lobular only (no ductal component) ⁴	310	6.6
Ductal and lobular ^{4,5}	236	5.0
Inflammatory ⁶	10	0.2
Paget's ⁷	13	0.3
Phyllodes ⁸	5	0.1
Other/unknown if ductal or lobular ⁹	565	11.9
<i>In situ</i>	1,074	22.7
Ductal only (no lobular component) ¹⁰	917	19.4
Lobular only (no ductal component) ¹⁰	130	2.7
Ductal and lobular ^{5,10}	15	0.3
Paget's ⁷	6	0.1
Other/unknown if ductal or lobular ¹¹	6	0.1
Invasiveness unknown ¹²	9	0.2
Stage at 1st Breast Cancer Diagnosis ¹³		
0	968	23.5
I	2,106	51.2
II	807	19.6
III	209	5.1
IV	26	0.6
<i>Unknown, missing, cannot stage</i>	616	
Estrogen Receptor (ER) Status for 1st Breast Cancer Diagnosis ¹³		
Positive	3,330	84.9
Negative	589	15.0
Borderline	5	0.1
<i>Unknown, missing, not performed</i>	808	
Progesterone Receptor (PR) Status for 1st Breast Cancer Diagnosis ¹³		
Positive	2,771	72.8
Negative	1028	27.0
Borderline	8	0.2
<i>Unknown, missing, not performed</i>	925	
HER2 Amplification Status for 1st Breast Cancer Diagnosis ¹³		
Positive	408	12.5
Negative	2,820	86.2
Borderline	44	1.3
<i>Unknown, missing, not performed</i>	1,460	
Combined ER, PR, HER2 Status ¹³		
Triple negative (ER-, PR-, and HER2-)	324	8.5
Not triple negative	3,482	91.5
<i>Unknown, missing, not performed</i>	926	

Characteristic	N (total = 4,732)	% of cases
Diagnosis Confirmation ¹⁴		
Medical	3,885	82.1
NDI Plus or death certificate only	59	1.2
None	788	16.7
Race/Ethnicity ¹⁵		
Non-Hispanic White	4,053	85.7
Non-Hispanic Black	378	8.0
Hispanic	178	3.8
Other	122	2.6
Missing	1	
Age (in years) at 1st Breast Cancer Diagnosis ¹⁶		
Under 50	427	9.0
50-64	2,052	43.4
65 and older	2,253	47.6
Menopausal Status at 1st Breast Cancer Diagnosis		
Pre-menopausal	695	14.7
Post-menopausal	4,036	85.3
Unknown	1	

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 11.0 includes events from follow-up phases that closed **on or before 9/30/2021**, excluding all data from participants who have withdrawn their data from the study (n=5). 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 11.0 breast cancer events (any type) exclude a) through c) below:

- a) Breast cancers diagnosed prior to participant's baseline date. [Total (n=117): Invasive ductal (n=32), invasive lobular (n=1), invasive ductal and lobular (n=1), invasive - unknown if ductal or lobular (n=6), DCIS (n=21), LCIS (n=54), *in situ* - unknown if ductal or lobular (n=1), and invasiveness unknown - unknown if ductal or lobular (n=1);
- b) Breast cancers diagnosed with unknown timing relative to baseline [Total (n=21): Invasive - unknown if ductal or lobular (n=7), DCIS (n=6), and LCIS (n=8)
- c) Unknown primary cancer diagnoses where breast was unlikely to be the primary site, but the possibility could not be ruled out (n=5)

³ Includes 'presumed invasive' (i.e., a carcinoma *in situ* with positive nodes) (n=1)

⁴ Invasive ductal only, Invasive lobular only, and invasive 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=9), Ductal and Lobular (n=1)

⁷ Paget's - Invasive: Ductal (n=12), Lobular (n=1); *in situ*: Ductal (n=6)

⁸ Phyllodes is neither ductal nor lobular; it is a sarcoma

⁹ Includes: a) Invasive but unknown if ductal or lobular (n=560), 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=5) and b) *In situ* type "neither ductal nor lobular, not otherwise specified" (n=1); 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=2); b) Ductal but unknown if invasive or *in situ* (n=4); c) Lobular but unknown if invasive or *in situ* (n=1); and d) Per MR, unable to determine if DCIS or atypical ductal hyperplasia (n=2)

- 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 only; 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=36), age was imputed as the midpoint of the range of plausible ages at diagnosis