

Sister Study First DCIS or Invasive Breast Cancer Events ¹ Stratified by Race/Ethnicity ²: Data Release 9.0 ³

Characteristic	Non-Hispanic White		Black (includes Hispanic Black)		Non-Black Hispanic/Other	
	N (total = 3,426)	%	N (total = 325)	%	N (total = 247)	%
Breast Cancer Subtype for 1st DCIS or Invasive Diagnosis						
Invasive ⁴	2,683	78.3	242	74.5	202	81.8
Ductal only (no lobular component) ⁵	1,898	55.4	157	48.3	140	56.7
Lobular only (no ductal component) ⁵	248	7.2	9	2.8	14	5.7
Ductal and lobular ^{5,6}	193	5.6	8	2.5	13	5.3
Inflammatory	5	0.1	1	0.3	0	0.0
Paget's	8	0.2	2	0.6	0	0.0
Phyllodes ⁷	5	0.1	0	0.0	0	0.0
Other/unknown if ductal or lobular ⁸	326	9.5	65	20.0	35	14.2
<i>In situ</i>	731	21.3	83	25.5	43	17.4
Ductal only (no lobular component) ⁹	708	20.7	81	24.9	43	17.4
Ductal and lobular ^{6,9}	18	0.5	0	0.0	0	0.0
Paget's	5	0.1	0	0.0	0	0.0
Other ¹⁰	0	0.0	2	0.6	0	0.0
Invasiveness unknown ¹¹	12	0.4	0	0.0	2	0.8
Stage at 1st DCIS or Invasive Diagnosis ¹²						
0	674	21.9	69	27.3	38	17.9
I	1,626	52.8	109	43.1	111	52.4
II	610	19.8	61	24.1	43	20.3
III	149	4.8	14	5.5	18	8.5
IV	21	0.7	0	0.0	2	0.9
<i>Unknown, missing, cannot stage</i>	346		72		35	
Estrogen Receptor (ER) Status: 1st DCIS or Invasive Breast Cancer ¹²						
Positive	2,559	85.7	180	75.9	165	82.9
Negative	422	14.1	55	23.2	34	17.1
Borderline	5	0.2	2	0.8	0	0.0
<i>Unknown, missing, not performed</i>	440		88		48	
Progesterone Receptor (PR) Status: 1st DCIS or Invasive Breast Cancer ¹²						
Positive	2,140	74.1	137	60.1	132	67.7
Negative	741	25.7	90	39.5	63	32.3
Borderline	7	0.2	1	0.4	0	0.0
<i>Unknown, missing, not performed</i>	538		97		52	

Characteristic	Non-Hispanic White		Black (includes Hispanic Black)		Non-Black Hispanic/Other	
	N (total = 3,426)	%	N (total = 325)	%	N (total = 247)	%
HER2 Amplification Status: 1st DCIS or Invasive Breast Cancer ¹²						
Positive	314	12.6	30	15.7	33	18.9
Negative	2,135	85.8	159	83.2	140	80.0
Borderline	40	1.6	2	1.0	2	1.1
<i>Unknown, missing, not performed</i>	937		134		72	
Combined ER, PR, HER2 Status: 1st DCIS or Invasive Breast Cancer ¹²						
Triple negative (ER-, PR-, and HER2-)	232	8.0	38	16.2	19	9.8
Not triple negative	2,671	92.0	196	83.8	175	90.2
<i>Unknown, missing, not performed</i>	523		91		53	
Diagnosis Confirmation ¹³						
Medical	2,811	82.0	223	68.6	189	76.5
NDI Plus or death certificate	31	0.9	12	3.7	2	0.8
None	584	17.0	90	27.7	56	22.7
Age (in years) at 1st DCIS or Invasive Breast Cancer ¹⁴						
Under 50	321	9.4	49	15.1	34	13.8
50-64	1,536	44.8	153	47.1	142	57.5
65 and older	1,569	45.8	123	37.8	71	28.7
Menopausal Status at 1st DCIS or Invasive Breast Cancer						
Pre-menopausal	513	15.0	60	18.6	52	21.1
Post-menopausal	2,897	85.0	263	81.4	195	78.9
<i>Unknown</i>	16		2		0	

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

¹ Breast cancer events (1st DCIS or invasive) are defined by the following ICD10 codes: D05.1 (ductal carcinoma *in situ*), C50 (all invasive breast cancer), and ductal D48.6 (neoplasm of uncertain behavior of breast)

² Excludes n=1 where race/ethnicity is missing

³ Data release 9.0 includes events from follow-up phases that closed on or before 9/30/2019, excluding any 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 9.0 breast cancer events for 1st DCIS or invasive diagnosis exclude a) through c) below:

- a) Breast cancers diagnosed prior to participant's baseline date;
- b) Breast cancers diagnosed with unknown timing relative to baseline;
- c) Unknown primary cancer diagnoses where breast was unlikely to be the primary site, but the possibility could not be ruled out

⁴ Includes 'presumed invasive' (i.e. a carcinoma *in situ* with positive nodes)

⁵ Ductal only, Lobular only, and Ductal and Lobular exclude inflammatory breast cancer and Paget's

- ⁶ 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)
- ⁷ Phyllodes is neither ductal nor lobular; it is a sarcoma
- ⁸ Includes: a) Invasive but unknown if ductal or lobular, these are typically self-report without MR confirmation; b) Invasive type “neither ductal nor lobular, not otherwise specified”, these are typically self-report without MR confirmation; and c) Per MR, presumed invasive - *in situ* tumor, positive nodes;
- ⁹ *in situ* Ductal only and *in situ* Ductal and Lobular exclude *in situ* Paget’s
- ¹⁰ Excludes all with lobular-only origin, these are typically self-report without MR confirmation
- ¹¹ Invasiveness unknown includes: a) Unknown if DCIS or invasive ductal; b) Both ductal and lobular but unknown if invasive or *in situ*; and c) Per MR, unable to determine if DCIS or atypical ductal hyperplasia
- ¹² Priority for stage and ER/PR/HER2 status when diagnosis is reported by multiple sources: Medical record>Breast Cancer Follow-Up Form
- ¹³ 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
- ¹⁴ For those missing age at diagnosis, age was imputed as the midpoint of the range of plausible ages at diagnosis