

Supplementary Online Content

Conant EF, Barlow WE, Herschorn SD, et al. Association of digital breast tomosynthesis vs digital mammography with cancer detection and recall rates by age and breast density. *JAMA Oncol*. Published online February 28, 2019. doi:10.1001/jamaoncol.2018.7078

eTable 1. Screening Examination Characteristics

eTable 2. Description of Detected Invasive Cancers

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Screening Examination Characteristics

		Digital mammography (DM)	Digital breast tomosynthesis (DBT)	Total
N (row %)	N screens	129,369 (71.7%)	50,971 (28.3%)	180,340
Research Center	Dartmouth/Brigham and Women's Hosp.	62,062 (48.0%)	11,848 (23.2%)	73,910 (41.0%)
	University of Pennsylvania	2,978 (2.3%)	20,228 (39.7%)	23,206 (12.9%)
	University of Vermont	64,329 (49.7%)	18,895 (37.1%)	83,224 (46.1%)
Age	Mean	56.4 years	54.6 years	55.9 years
Age categories (col %)	40-49	33,084 (25.6%)	16,826 (33.0%)	49,910 (27.7%)
	50-64	68,231 (52.7%)	25,797 (50.6%)	94,028 (52.1%)
	65-74	28,054 (21.7%)	8,348 (16.4%)	36,402 (20.2%)
Breast density (col %)	Not dense	85,275 (65.9%)	30,901 (60.6%)	116,176 (64.4%)
	Dense	44,094 (34.1%)	20,070 (39.4%)	64,164 (35.6%)
Screening exam	First	8,734 (6.8%)	5,246 (10.3%)	13,980 (7.8%)
	Subsequent	120,635 (93.2%)	45,725 (89.7%)	166,360 (92.2%)

eTable 2. Description of Detected Invasive Cancers†

	Age	Total cancers (DCIS + Invasive)	Invasive Cancers N (%)	Poor Prognosis*	Node positive	Her2 positive	Hormone receptor positive	Size			Grade (row %)		
								<1 cm	1-2 cm	2+ cm	1	2	3
DM	40-49	71	47 (66.2%)	40.4%	25.5%	17.1%	91.1%	31.8%	40.9%	27.3%	25.0%	47.7%	27.3%
	50-64	217	168 (77.4%)	35.1%	20.2%	13.0%	87.8%	45.7%	32.3%	22.0%	24.0%	50.0%	26.0%
	65-74	134	112 (83.6%)	31.3%	14.4%	19.0%	81.1%	39.3%	42.0%	18.8%	26.4%	41.5%	32.1%
	Total	422	327 (77.5%)	34.6%	19.0%	15.6%	85.9%	41.6%	36.9%	21.6%	25.0%	46.8%	28.2%
DBT	40-49	38	28 (73.7%)	25.0%	14.3%	15.4%	88.9%	53.6%	25.0%	21.4%	12.0%	56.0%	32.0%
	50-64	63	44 (69.8%)	29.6%	6.8%	15.0%	90.7%	41.9%	44.2%	14.0%	21.6%	59.5%	18.9%
	65-74	38	27 (71.0%)	22.2%	15.4%	9.1%	84.0%	59.3%	25.9%	14.8%	30.4%	65.2%	4.4%
	Total	99	139 (71.2%)	26.3%	11.2%	13.6%	88.4%	50.0%	33.7%	16.3%	21.2%	60.0%	18.8%

* Defined as demonstrating any of the following characteristics: (1) metastases; (2) positive nodes; (3) HER2-positive and tumor size ≥ 1 cm; (4) hormone receptor-negative (both ER- and PR-) and tumor size ≥ 1 cm; (5) hormone receptor-positive (ER+ or PR+) and tumor size ≥ 2 cm.

†Restricted to cancers with complete cancer characteristic data from cancer registry files.