

Supplementary Online Content

Buzdar AU, Suman VJ, Meric-Bernstam F, et al. Disease-free and overall survival among patients with operable HER2-positive breast cancer treated with sequential vs concurrent chemotherapy: the ACOSOG Z1041 (Alliance) randomized clinical trial. *JAMA Oncol*. Published online September 6, 2018. doi:10.1001/jamaoncol.2018.3691

eTable 1. Patient and Tumor Characteristics

eTable 2. Disease Events

eTable 3. Sites of Distant Disease Recurrence and Second Primaries

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

eTable 1. Patient and Tumor Characteristics

Characteristic	No. of Patients (%)	
	Arm 1 (n=138)	Arm 2 (n=142)
Median age in years (range)	50 (30-76)	50 (28-76)
Race (self-reported)		
White	118 (85.5%)	114 (80.2%)
Black or African American	13 (9.4%)	16 (11.3%)
Asian	3 (2.2%)	5 (3.5%)
American Indian or Alaska Native	2 (1.4%)	2 (1.4%)
Not reported	2 (1.4%)	5 (3.5%)
Ethnicity (self-reported)		
Hispanic or Latino	26 (18.8%)	38 (26.8%)
Not Hispanic or Latino	110 (79.7%)	101 (71.1%)
Not reported	2 (1.4%)	1 (2.2%)
Body mass index		
Underweight/normal (BMI < 25.0)	43 (31.2%)	46 (32.4%)
Overweight/obese (BMI ≥ 25.0)	95 (68.8%)	96 (67.6%)
ECOG performance status		
0	129 (93.5%)	128 (90.1%)
1	9 (6.5%)	14 (9.9%)
Clinical tumor stage		
T1	8 (5.8%)	10 (7.0%)
T2	76 (55.1%)	78 (54.9%)
T3	41 (29.7%)	41 (28.9%)
T4	13 (9.4%)	13 (9.2%)
Clinical nodal stage		
N0	49 (35.5%)	52 (36.6%)
N1	71 (51.5%)	82 (57.8%)
N2	7 (5.1%)	7 (4.9%)
N3	11 (8.0%)	1 (0.7%)
Hormone receptor status		
ER positive/PR positive	49 (35.5%)	59 (41.6%)
ER positive/PR negative	31 (22.5%)	23 (16.2%)
ER negative/PR positive	4 (2.9%)	2 (1.4%)
ER negative/PR negative	54 (39.1%)	58 (40.8%)
Surgery performed		
yes	130 (94.2%)	138 (97.2%)
no, patient refusal	4 (2.9%)	2 (1.4%)
no, physician discretion	2 (1.4%)	1 (0.7%)
no, second primary diagnosis	1 (0.7%)	0
no, drop in LVEF/developed pulmonary nodules	0	1 (0.7%)
no, death due to other causes	1 (0.7%)	0

Surgical findings		
pCR in breast and nodes	73 (52.9%)	71 (50.0%)
pCR in breast, residual disease in nodes	5 (3.6%)	6 (4.2%)
residual disease in breast but not in the nodes	35 (25.4%)	30 (21.1%)
residual disease in breast and nodes	17 (12.3%)	30 (21.1%)
residual disease in breast, nodes were not sampled	0	1 (0.7%)
surgery not performed	8 (5.8%)	4 (2.8%)
Trastuzumab after surgical resection	n=130	n=138
yes	121 (93.1%)	131 (94.9%)
no, due to cardiotoxicity	5 (3.8%)	2 (1.5%)
no, due to cytokine release syndrome	0	1 (0.7%)
no, due to disease progression	1 (0.8%)	0
not reported	3 (2.3%)	4 (2.9%)

BMI – body mass index; ECOG – Eastern Cooperative Oncology Group; ER – estrogen receptor; HER2 – human epidermal growth factor receptor 2; LVEF – left ventricular ejection fraction; N – node; pCR – pathologic complete response; PR – progesterone receptor; T - tumor

eTable 2. Disease Events

First disease event	Vital status	Arm 1: FEC → P+T (n=138)	Arm 2: P+T → FEC+T (n=142)
None	alive	116	115
	death	2	2
Local/regional recurrence	alive	5	3
	death	0	3
Distant recurrence	alive	7	10
	death	6	6
Second primary	alive	2	2
	death	0	1

FEC – 5-fluorouracil, epirubicin and cyclophosphamide; P – paclitaxel; T - trastuzumab

eTable 3. Sites of Distant Disease Recurrence and Second Primaries

FEC – 5-fluorouracil, epirubicin and cyclophosphamide; P – paclitaxel; T - trastuzumab

	Anatomic sites	Arm 1: FEC → P+T (n=15)	Arm 2: P+T → FEC+T (n=19)
Distant recurrence	bone	2	5
	bone + liver	0	1
	brain	5	2
	hilar, non-IP or mediastinal lymph nodes	0	3
	kidney	1	0
	liver	3	2
	lung	1	3
	sub pectoral lymph nodes	1	0
Second primary	malignant melanoma	1	0
	colorectal cancer	1	0
	lung cancer	0	2
	thyroid cancer	0	1