

Supplementary Table 1. Patterns of care after developing disease recurrence.

	Group A (≤12 months) n=201 No. (%)	Group B (>12 months) n=203 No. (%)	P value
Surgery:			0.825
yes	33 (16)	35 (17)	
no	168 (84)	168 (83)	
Radiotherapy:			0.130
yes	83 (41)	69 (34)	
no	118 (59)	134 (66)	
First-line chemotherapy:			0.106
Administered	117 (58)	134 (66)	
Not administered	84 (42)	69 (34)	
Type of chemotherapy:			0.113
Taxane-based regimens	60 (51)	84 (63)	
Capecitabine	38 (32)	27 (20)	
Vinorelbine	11 (9)	10 (7)	
Others	8 (7)	13 (10)	
First-line endocrine therapy*:			0.011
Administered	43 (46)	38 (29)	
Not administered	51 (54)	92 (71)	
Type of endocrine therapy*:			0.785
SERD	2 (13)	2 (17)	
SERM	2 (13)	1 (8)	
AI	10 (67)	9 (75)	
OFS	1 (7)	0 (0)	
Missing	28	26	
First-line anti-HER2 therapy:			0.988
Administered	115 (57)	116 (57)	
Not administered/missing	86 (43)	87 (43)	
Type of anti-HER2 treatment**:			0.022
Trastuzumab alone	70 (61)	75 (65)	

Pertuzumab ± Trastuzumab	9 (8)	20 (17)	
Lapatinib alone	29 (25)	13 (11)	
T-DM1	0 (0)	1 (<1)	
Others	7 (6)	7 (6)	

*calculated on the total number of patients with hormone receptor-positive breast cancer (94 in group A and 130 in group B).

**calculated on the total number of patients who received first-line anti-HER2 therapy (115 in group A and 116 in group B).

SERD selective estrogen receptor degrader, *SERM* selective estrogen receptor modulator, *AI* aromatase inhibitors, *OFS* ovarian function suppression.

Supplementary Table 2. Univariate and multivariate analyses for overall survival.

	Events (%)	N	Univariate HR (95% CI)	Univariate P value	Multivariate* HR (95% CI)	Multivariate P value
All patients	262 (64.9)	404				
Group A (≤12 months)	156 (77.6)	201	-	-	-	-
Group B (>12 months)	106 (52.2)	203	0.61 (0.48-0.78)	<0.001	0.69 (0.54-0.89)	0.004
No pertuzumab	120 (32.1)	374				
Group A (≤12 months)	38 (19.7)	193	-	-	-	-
Group B (>12 months)	82 (45.3)	181	0.62 (0.48-0.79)	<0.001	0.66 (0.51-0.86)	0.002
Hormone receptor-positive	127 (56.7)	224				
Group A (≤12 months)	69 (73.4)	94	-	-	-	-
Group B (>12 months)	58 (44.6)	130	0.63 (0.44-0.89)	0.009	0.69 (0.48-0.99)	0.043
Hormone receptor-negative	135 (75.0)	180				
Group A (≤12 months)	87 (81.3)	107	-	-	-	-
Group B (>12 months)	48 (65.8)	73	0.66 (0.46-0.94)	0.022	0.68 (0.48-0.98)	0.040
Trastuzumab	138 (63.9)	216				
Group A (≤12 months)	87 (77.0)	113	-	-	-	-
Group B (>12 months)	51 (49.5)	103	0.64 (0.45-0.91)	0.012	0.80 (0.55-1.17)	0.249
Trastuzumab plus lapatinib	124 (66.0)	188				
Group A (≤12 months)	69 (78.4)	88	-	-	-	-
Group B (>12 months)	55 (55.0)	100	0.55 (0.38-0.78)	<0.001	0.55 (0.38-0.80)	0.002

* Multivariate analyses were adjusted for age at diagnosis, tumor size and hormone receptor status.

HR hazard ratio, CI confidence intervals.