

Supplementary Information

Prognostic utility of tumor-infiltrating lymphocytes in residual tumor after neoadjuvant chemotherapy with trastuzumab for HER2-positive breast cancer

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Table S1. Patients and tumor characteristics

Age range (years)		Clinical tumor size	
<40	20	T1	6
40 _≤ and <60	82	T2	80
≥60	26	T3	26
Menopausal status		T4	16
Premenopausal	51	Clinical nodal status	
Postmenopausal	77	N0	41
Type of breast surgery		N1	58
Breast-conserving surgery	108	N2	17
Mastectomy	20	N3	12
Axillary surgery		Clinical TNM stage	
Sentinel lymph node biopsy alone	53	I	2
Axillary lymph node dissection	75	IIA	37
ER status		IIB	37
ER-positive	45	IIIA	29
ER-negative	83	IIIB	11
		IIIC	12
Abbreviations: ER, estrogen receptor			

Table S2. Relationship between pathological complete response and clinicopathological factors

		pCR	Non-pCR	pCR ratio (%)	<i>p</i>
		<i>N</i>	<i>N</i>		
ER	Negative	65	18	78.3	<0.0001
	Positive	18	27	40.0	
PgR	Negative	69	23	75.0	0.00012
	Positive	14	22	38.9	
Ki-67 labeling index	High ($\geq 30\%$)	66	26	71.7	0.0090
	Low ($< 30\%$)	17	19	47.2	
Histological grade	Grade 3	76	33	69.7	0.0056
	Grade 1/2	7	12	36.8	
Clinical tumor size	T 3/4	27	19	58.7	0.28
	T 1/2	56	26	68.3	
Clinical nodal status	Positive	56	31	64.4	0.87
	Negative	27	14	65.9	
Abbreviations: ER, estrogen receptor; PgR, progesterone receptor; pCR, pathological complete response					

Table S3. Correlations of tumor-infiltrating lymphocytes grades in the primary tumor and clinicopathological factors

		Low (TILs: 0%–10%)	Intermediate (TILs: 10%–40%)	High (TILs: 40%–90%)	<i>p</i>
ER	Negative	31	29	19	0.015
	Positive	35	9	5	
PgR	Negative	41	32	19	0.037
	Positive	25	6	5	
Ki-67 labeling index	High ($\geq 30\%$)	41	30	21	0.031
	Low ($< 30\%$)	25	8	3	
Histological grade	Grade 3	51	36	22	0.033
	Grade 1/2	15	2	2	
Clinical tumor size	T 3/4	21	15	10	0.60
	T 1/2	45	23	14	
Clinical nodal status	Positive	39	28	20	0.062
	Negative	27	10	4	
Abbreviations: TILs, tumor-infiltrating lymphocytes; ER, estrogen receptor; PgR, progesterone receptor					