

Supplementary Table S1: HER2 expression of CTC in relation to patient characteristics

Clinical parameter at baseline	HER2 expression of CTC				
	0	1+	2+	3+	<i>p-value</i>
Age					
<50	17	4	1	5	<i>n.s.</i>
≥50	12	5	5	9	
c T					<i>p=0.002*</i>
T1	0	1	0	0	
T2	21	4	2	10	
T3	6	4	0	1	
T4	2	0	4	3	
cN					<i>n.s.**</i>
N0	13	4	4	8	
N1	13	4	2	4	
N2	3	1	0	1	
N3	0	0	0	1	
Histology					<i>n.s.</i>
Ductal	25	5	5	14	
Lobular	3	2	0	0	
Others	1	2	1	0	
Grading					<i>n.s.</i>
G1	0	0	0	0	
G2	16	4	3	8	
G3	12	5	2	6	
HER2					<i>n.s.</i>
Negative	20	7	2	8	
Positive	9	2	4	6	
ER					<i>n.s.</i>
Negative	15	6	3	7	
Positive	14	3	3	7	
PR					<i>n.s.</i>
Negative	16	5	4	7	
Positive	13	4	2	7	
No pCR	22	8	5	10	<i>n.s.</i>
pCR	7	1	1	4	

* T1-3 versus T4

** also for N0 versus N+

NT: neoadjuvant therapy

n.s.: not significant

Supplementary Table S2: Pathological complete response (pCR) of the patients and histopathological characteristics of the primary tumors

Histopathological characteristics of the primary tumors	No pCR	pCR	<i>p-value</i>
c T			
T1	8	1	<i>n.s.</i>
T2	145	42	
T3	45	5	
T4	32	9	
cN			
N0	103	24	<i>n.s.</i>
N1	112	31	
N2	13	1	
N3	2	1	
Histology			
Ductal	183	50	<i>n.s.</i>
Lobular	24	1	
Others	23	6	
Grading			
G1	3	0	0.0002
G2	151	23	
G3	64	33	
HER2			
Negative	155	27	0.005
Positive	75	30	
ER			
Negative	80	43	<0.0001
Positive	150	14	
PR			
Negative	88	43	<0.0001
Positive	142	14	
Triple negativity			
Yes	40	19	0.008
No	190	38	

ns: not significant