

**Supplementary Table 1: Clinical features of TCGA HER2+.**

Variables	Number of patients	Percentage
Age (years)		
≤60	24	51.1
>60	15	31.9
ER		
Negative	24	51.1
Positive	10	21.3
PR		
Negative	28	59.6
Positive	7	14.9
HER		
Negative	9	19.1
Positive	26	55.3
Stage		
T1	11	23.4
T2	26	55.3
T3	1	2.1
T4	1	2.1

TCGA: The Cancer Genome Atlas; ER: Estrogen receptor; HER: Human epidermal growth factor receptor; PR: Progesterone receptor.

**Supplementary Table 2: Clinical features of GSE6130.**

Variables	Number of patients	Percentage
Age (years)		
≤60	85	65.9

>60	40	31.0
ER		
Negative	54	41.9
Positive	67	51.9
PGR		
Negative	60	46.5
Positive	43	33.3
HER		
Negative	94	72.9
Positive	23	17.8
Grade		
1	11	8.5
2	40	31.0
3	66	51.2

---

ER: Estrogen receptor; HER: Human epidermal growth factor receptor; PGR: Progesterone receptors.