

**S3 Table.** Baseline and after-progression HER2 expression, *HER2*:CEP17 ratio, and ctDNA *HER2* copy number

Patient No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
HER2 IHC	BL	3+	3+	3+	3+	3+	3+	3+	3+	3+	2+	3+	3+	2+	3+	2+	3+	3+	2+	3+	3+	2+
	PD						3+	3+					3+		2+	1+						2+
<i>HER</i> : CEP17 ratio	BL	13.86	7.6	6.32	6.1	8.01	4.43	4.38	5.29	4.6	5.8	12.91	5.47	8.3	8.3	4.06	5.98	4.49	3.9	16.5	6.71	3.8
	PD						6.96	9.0					7.63		7.4							4.31
<i>HER2</i> ctDNA CN	BL	261.9	NOT AM P	NOT AM P	2.7	12.5	NOT AM P	26	123.1	2.8	NOT AM P	117.8	NE G	N A	10.8	5.4	NA	NA	3	14.8	5.5	22.1
	PD	13.1	NA	NA	22.9	48.3	NOT AM P	37.8	50.6	20.1	NEG	79.2	10	N A	8.2	NOT AM P	3.4	NA	4.7	14	10.7	19.1

BL, baseline; CEP17, centromeric region of chromosome 17; CN, copy number; ctDNA, circulating tumor DNA; HER2, human epidermal growth factor receptor 2; IHC, immunohistochemistry; NA, not available (no available sample for testing); NOT AMP, not amplified; NEG, negative (no ctDNA was detected); PD, progression disease.