

Table S1: Pathological and clinical characteristics of patients in relation to metastasis free survival (MFS)

	Number of patients (%)	Number of metastasis (%)	MFS <i>p</i> -value ^a
<i>Total</i>	456 (100.0)	181 (39.7)	
<i>Age</i>			
≤50	98 (21.5)	39 (39.8)	0.88 (NS)
>50	358 (78.5)	142 (39.7)	
<i>SBR histological grade</i> ^{b, c}			
I	58 (13)	11 (19.0)	0.0011
II	229 (51.2)	93 (40.6)	
III	160 (35.8)	73 (45.6)	
<i>Lymph node status</i> ^d			
0	119 (26.1)	36 (30.3)	0.00000012
1-3	237 (52.1)	83 (35.0)	
>3	96 (21.8)	60 (62.5)	
<i>Macroscopic tumor size</i> ^e			
≤25mm	223 (49.8)	69 (30.9)	0.000014
>25mm	225 (50.2)	111 (49.3)	
<i>ERα status</i>			
Negative	118 (25.9)	50 (42.4)	0.077 (NS)
Positive	338 (74.1)	131 (38.8)	
<i>PR status</i>			
Negative	194 (42.5)	86 (44.3)	0.013
Positive	262 (57.5)	95 (36.3)	
<i>ERBB2 status</i>			
Negative	357 (78.3)	138 (38.7)	0.27 (NS)
Positive	99 (21.7)	43 (43.4)	
<i>Molecular subtypes</i>			
HR- ERBB2-	68 (14.9)	26 (38.2)	0.055 (NS)
HR- ERBB2+	45 (9.9)	23 (51.1)	
HR+ ERBB2-	289 (63.4)	112 (38.8)	
HR+ ERBB2+	54 (11.8)	20 (37.0)	
<i>PIK3CA mutation status</i>			
wild type	307 (67.3)	129 (42.0)	0.071 (NS)
mutated	149 (32.7)	52 (34.9)	
<i>MMP13 and ETV4 mRNA expression</i>			
Low <i>ETV4</i>	82 (18.0)	30 (36.6)	0.000041
Low <i>MMP13</i> and high <i>ETV4</i>	255 (55.9)	86 (33.7)	
High <i>MMP13</i> and high <i>ETV4</i>	119 (26.1)	65 (54.6)	

Abbreviations: ER α : oestrogen receptor alpha; PR: progesterone receptor; ERBB2: human epidermal growth factor receptor 2. The bold values are statistically significant (*p*-value<0.05).

^a Log-rank test.

^b Scarff Bloom Richardson classification.

^c Information available for 447 patients.

^d Information available for 452 patients.

^e Information available for 448 patients.