

Supplementary Table 1. Multivariate analysis for overall survival based on the Ki-67 LI using ImmunoRatio and manual counting using a 20% cut-off value in a total of 577 breast cancer cases.

	ImmunoRatio			Manual counting		
	p	HR	95% CI	p	HR	95% CI
Ki-67 LI (20% cutoff)	0.226	1.355	0.829-2.215	0.389	1.248	0.754-2.064
Age ( $\leq 50$ vs. $>50$ )	0.471	1.193	0.738-1.926	0.473	1.191	0.738-1.924
Tumor size ( $\leq 2$ cm vs. $>2$ cm)	0.656	1.121	0.679-1.849	0.682	1.111	0.672-1.836
Nodal metastasis (absent vs. present)	0.000	4.808	2.727-8.477	0.000	4.698	2.671-8.264
Nuclear grade (low + intermediate vs. high)	0.081	1.569	0.946-2.603	0.072	1.593	0.959-2.644
ER status (negative vs. positive)	0.138	0.671	0.396-1.137	0.162	0.682	0.399-1.166

HR, hazard ratio; CI, confidence interval; ER, estrogen receptor

Supplementary Table 2. Multivariate analysis for overall survival based on the Ki-67 LI using ImmunoRatio and manual counting using a 20% cut-off value in the hormone receptor positive cases (n =461).

	ImmunoRatio			Manual counting		
	p	HR	95% CI	p	HR	95% CI
Ki-67 LI (20% cutoff)	0.210	1.439	0.815-2.541	0.274	1.383	0.774-2.470
Age ( $\leq 50$ vs. $>50$ )	0.640	1.145	0.650-2.015	0.628	1.150	0.654-2.023
Tumor size ( $\leq 2$ cm vs. $>2$ cm)	0.456	1.249	0.696-2.239	0.469	1.242	0.691-2.231
Nodal metastasis (absent vs. present)	0.000	3.874	2.010-7.464	0.000	3.857	2.000-7.439
Nuclear grade (low + intermediate vs. high)	0.287	1.388	0.759-2.541	0.269	1.406	0.769-2.571
ER status (negative vs. positive)	0.136	0.524	0.225-1.225	0.183	0.557	0.235-1.319

HR, hazard ratio; CI, confidence interval; ER, estrogen receptor