

## Supplementary Table 1. The prognostic factors that affected patients survival the development of metastasis in univariate survival analysis

Characteristic	Progression-free survival		Overall survival	
	Hazard ratio (95% CI)	p value	Hazard ratio (95% CI)	p value
Age <sup>a</sup> (≥ 57 year)	1.065 (0.680–1.670)	0.782	1.242 (0.666–2.315)	0.495
Time to recurrence from surgery (< 5 years)	1.049 (0.639–1.723)	0.850	1.131 (0.575–2.228)	0.721
Time to fulvestrant from 1st endocrine therapy (< 5 years)	1.052 (0.613–1.806)	0.855	1.267 (0.654–2.455)	0.483
Stage at diagnosis (stage IV)	1.453 (0.830–2.541)	0.191	2.387 (1.065–5.351)	0.035
Adjuvant endocrine therapy (received)	0.990 (0.625–1.569)	0.966	0.599 (0.321–1.117)	0.107
Chemotherapy (≥ 2 regimen)	1.464 (0.914–2.346)	0.113	2.254 (1.208–4.207)	0.011
Visceral metastasis (present)	1.152 (0.732–1.813)	0.540	1.498 (0.793–2.832)	0.213

CI, confidence interval.

<sup>a</sup>Age at time of fulvestrant therapy.