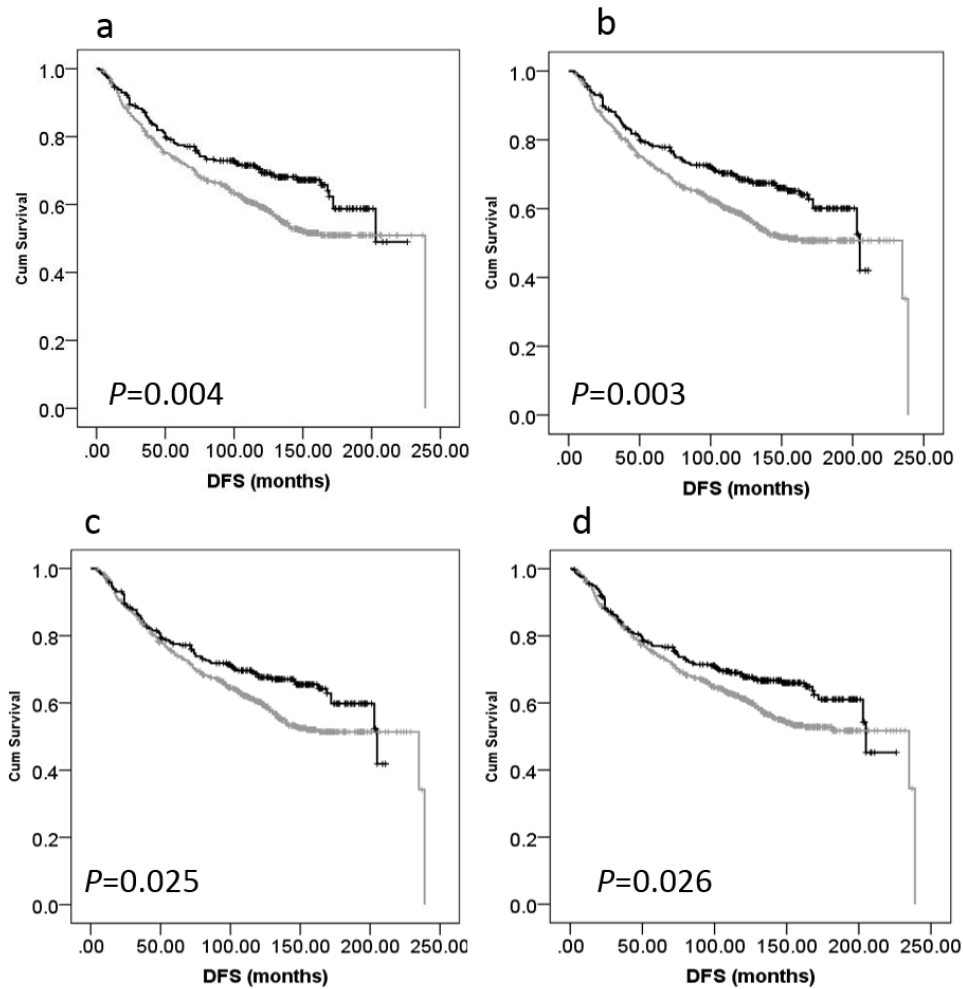


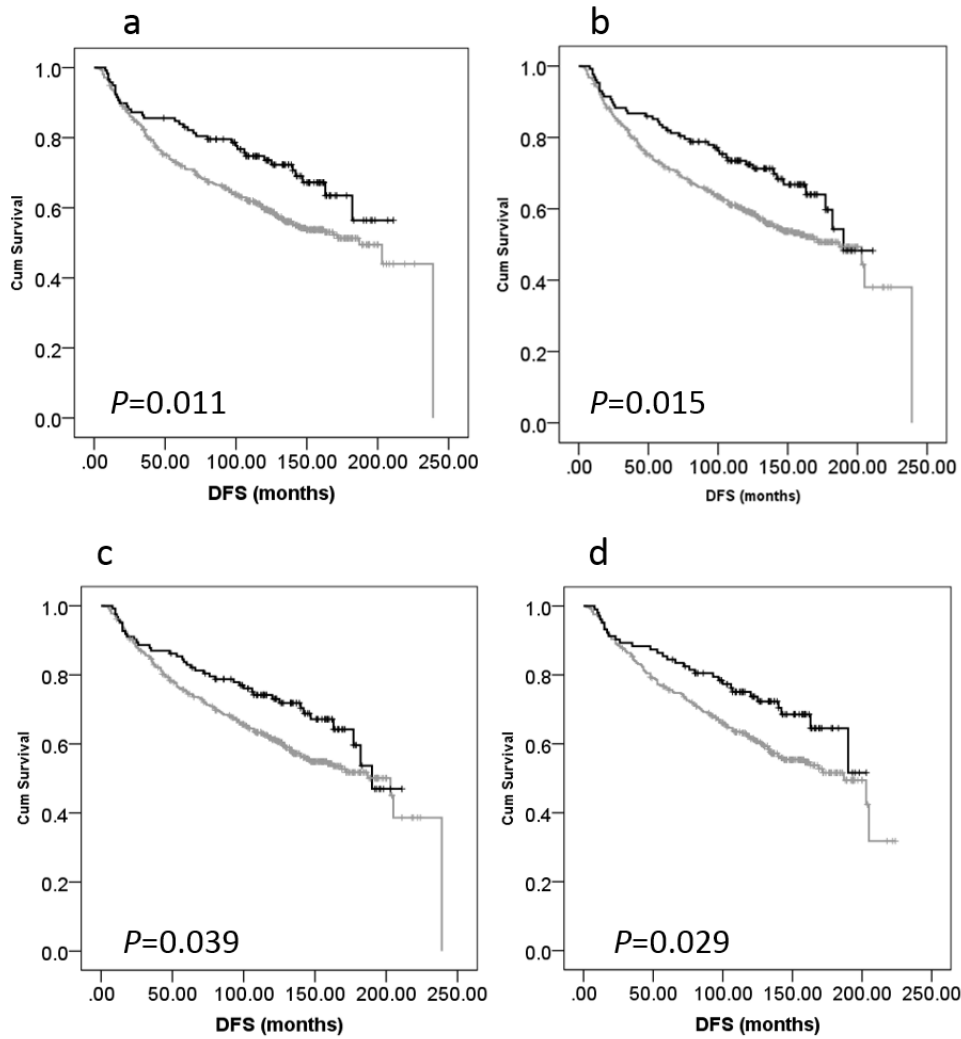
Supplementary Table 1. Multivariate Cox regression analysis of IL-6/IL-10 expression adjusted to other prognostic factors.

Variables	DFS (IL-6)			BCSS (IL-6)			DFS (IL-10)		
	HR	95.0% CI	p-value	HR	95.0% CI	p-value	HR	95.0% CI	p-value
IL	0.788	0.603-1.029	0.08	0.852	0.627-1.157	0.305	0.799	0.543-1.175	0.254
Age	0.864	0.588-1.271	0.459	1.206	0.789-1.878	0.397	0.673	0.436-1.037	0.073
Tumour size	1.155	1.007-1.325	0.039	1.13	0.941-1.148	0.479	1.344	0.956-1.890	0.089
Tumour stage	2.862	2.039-4.017	0.001	2.785	1.897-3.795	<0.001	2.661	1.765-4.012	<0.001
Tumour grade	1.294	0.984-1.701	0.065	1.635	1.169-2.209	0.004	1.097	0.789-1.524	0.581
NPI	0.76	0.516-1.120	0.165	1.023	0.713-1.611	0.925	1.022	0.624-1.674	0.932
ER (-/+)	1.305	0.896-1.900	0.165	1.782	1.221-2.646	0.003	1.329	0.845-2.090	0.219
PgR (-/+)	0.869	0.635-1.190	0.382	0.592	0.420-0.817	0.002	1.048	0.714-1.538	0.811
HER-2 (-/+)	1.205	0.858-1.692	0.281	1.452	1.021-2.073	0.039	1.683	1.157-2.448	0.006
LVI (-/+)	1.491	1.172-1.898	0.001	1.493	1.137-1.940	0.003	1.762	1.344-2.311	<0.001
LN status	0.547	0.363-0.822	0.004	0.671	0.433-1.040	0.074	0.439	0.270-0.714	0.001

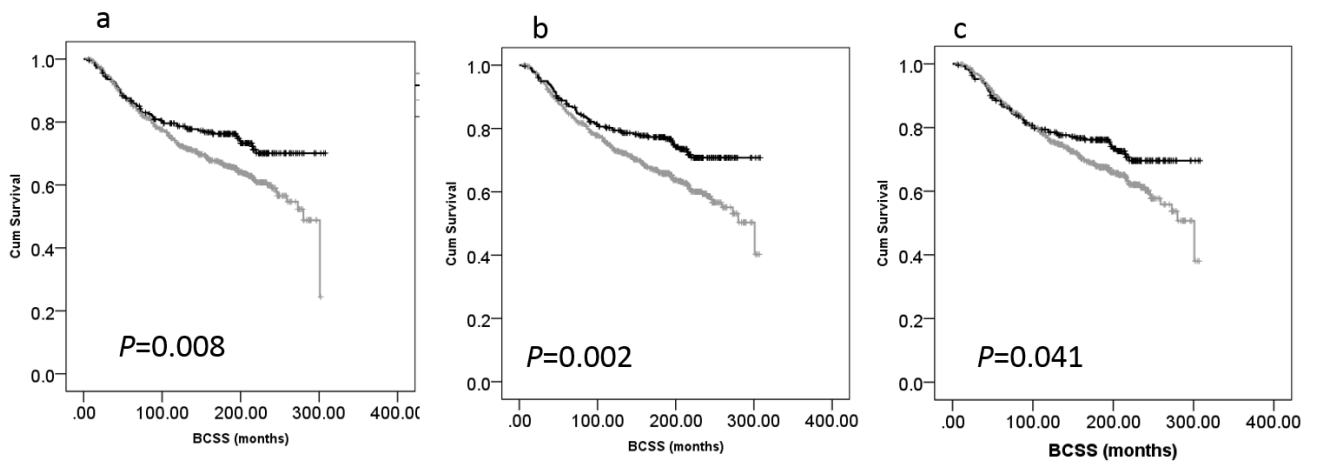
Abbreviation: HR, hazard ratio; CI, confidence interval; NPI is Nottingham Prognostic Index; ER, oestrogen receptor; PgR, progesterone receptor; HER-2, epidermal growth factor receptor 2; LVI, lymphovascular invasion; LN, lymph node.



Supplementary Figure 1. Kaplan-Meier analyses of associations of IL-6 expression with disease-free survival in phenotypic subgroups. High IL-6 expression was significantly associated with disease-free survival in: (a) non-basal ($P=0.004$), (b) non-triple negative ($P=0.003$), (c) ER positive ($P=0.025$), and (d) HER-2 negative ($P=0.026$) patient subgroups. Significance was determined using the log-rank test. Black represents high expression and grey represents low expression of the cytokine



Supplementary Figure 2. Kaplan-Meier analyses of associations of IL-10 expression with disease-free survival in phenotypic subgroups. High IL-10 expression was significantly associated with disease-free survival in (a) non-basal ($P=0.011$), (b) non-triple negative ($P=0.015$), (c) ER positive ($P=0.039$), and (d) PgR positive ($P=0.029$) patient subgroups. Significance was determined using the log-rank test. Black represents high expression and grey represents low expression of the cytokine



Supplementary Figure 3. BCSS of IL-6 in disease subgroups. Kaplan-Meier BCSS analysis showing the impact of IL-6 in phenotypic subgroups with significance determined using the log-rank test. High IL-6 expression was significantly associated with BCSS in: (a) non-basal-like ($P=0.008$), (b) non triple negative ($P =0.002$), and (c) ER positive ($P =0.041$) patient subgroups. Black represents high expression and grey represents low expression of the cytokine