Supplementary Table 1. Absolute standardized difference between matched and non-matched cohort for checking balance among groups

Variables	Chemotherapy vs No-chemotherapy	
	Non-matched cohort (n=547)	Matched cohort (n=178)
Age at diagnosis	53.0%	0.8%
LVI	11.7%	12.4%
Tumor size	9.8%	6.8%
Grade	9.1%	4.1%
Histology	2.7%	10.8%
Surgery	1.4%	4.6%
Endocrine therapy	15.2%	7.7%
Age at diagnosis/ surgery interaction	5.5%	5.3%
Grade/ surgery interaction	10.4%	6.2%
Tumor size/ surgery interaction	0.4%	2.8%
Note. Absolute standardized difference <10% for the matching cohort suggests a substantial reduction of bias between the two groups		

Supplementary Table 2. Multivariable analysis of patients who underwent chemotherapy versus those who did not, by standard recurrence original (RS) category

Recurrence score	HR [95% CI]	*P* value
<18		
Chemotherapy received vs not received		
IDFS	1.09 [0.14, 8.62]	0.938
RFS	*	*
DRFS	*	*
OS	*	*
18-30		
Chemotherapy received vs not received		
IDFS	0.78 [0.34, 1.80]	0.571
RFS	0.98 [0.32, 3.06]	0.975
DRFS	0.80 [0.23, 2.71]	0.716
OS	0.86 [0.15, 4.91]	0.861
>30		
Chemotherapy received vs not received		
IDFS	0.50 [0.13, 2.02]	0.334
RFS	0.38 [0.09, 1.66]	0.200
DRFS	0.32 [0.07, 1.47]	0.143
OS	0.13 [0.01, 1.30]	0.082

*Not reported due to a small number of events with unstable results.
Abbreviations: IDFS, invasive disease-free survival; RFS, recurrence-free survival; DRFS, distant relapse-free survival; OS, overall survival; RS, recurrence score; HR, hazard ratio; CI, confidence interval.