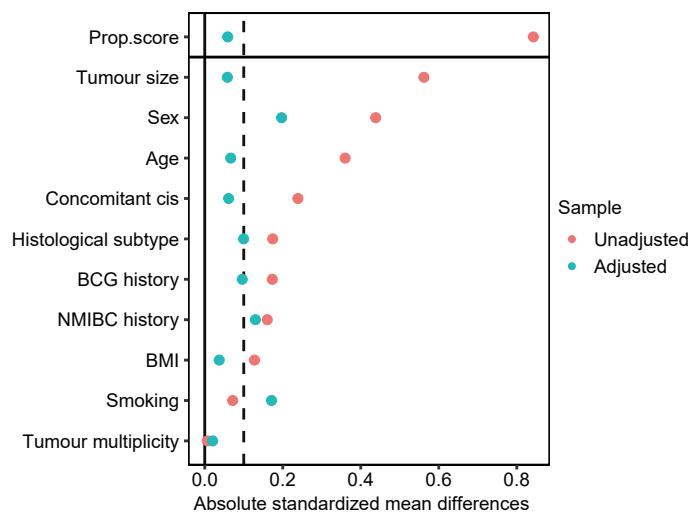
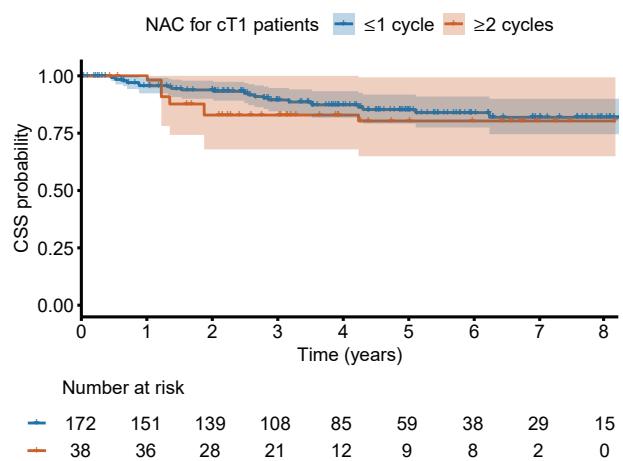


## Supplementary figure 1

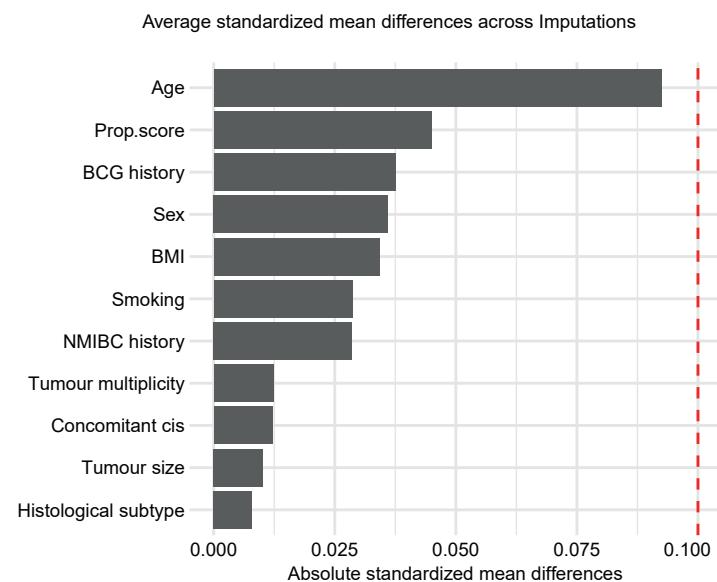
(a)



(b)



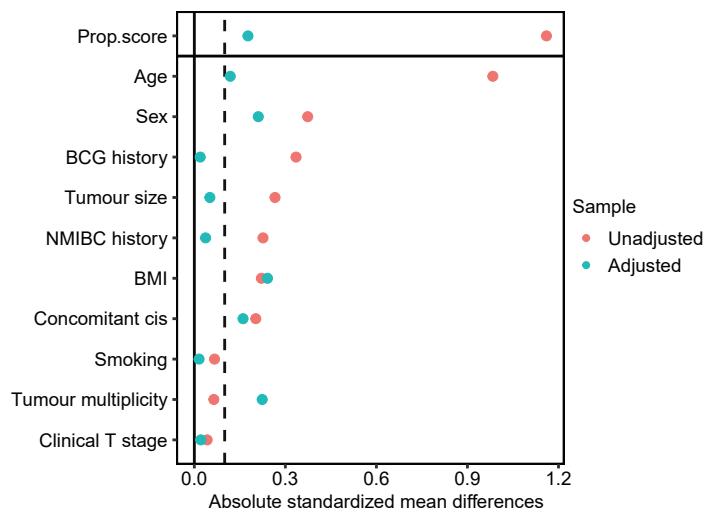
(c)



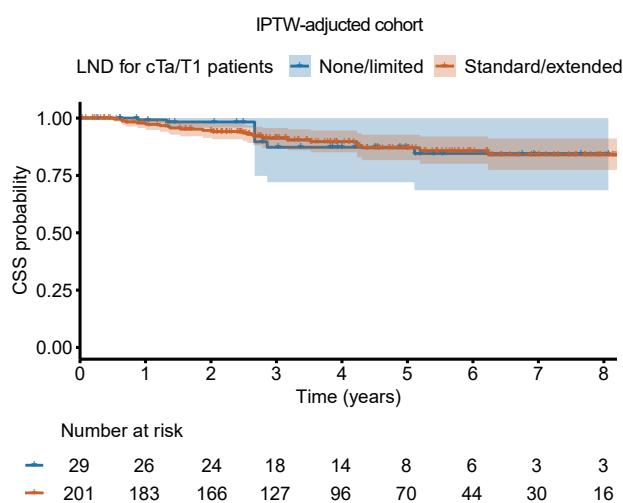
**Figure S1.** (a) SMDs for the balancing of covariates before and after IPTW in patients with cT1 disease, weighted according to the administration of NAC. IPTW improved the covariate balance between groups. Among the 10 covariates, the adjusted SMDs for one covariate slightly exceeded the conventional threshold of 0.1, and those for two others were approximately 0.2. (b) Kaplan-Meier curves for CSS in patients with cT1 disease, stratified by the administration of NAC in the IPTW-adjusted cohort. (c) Average SMDs across multiply imputed datasets showing the balance of covariates after IPTW in patients with cT1 disease, weighted according to the administration of NAC. The average SMD for each covariate across the imputed datasets was below the conventional threshold of 0.1. SMDs, standardised mean differences; IPTW, inverse probability of treatment weighting; NAC, neoadjuvant chemotherapy; CSS, cancer-specific survival.

## Supplementary figure 2

(a)



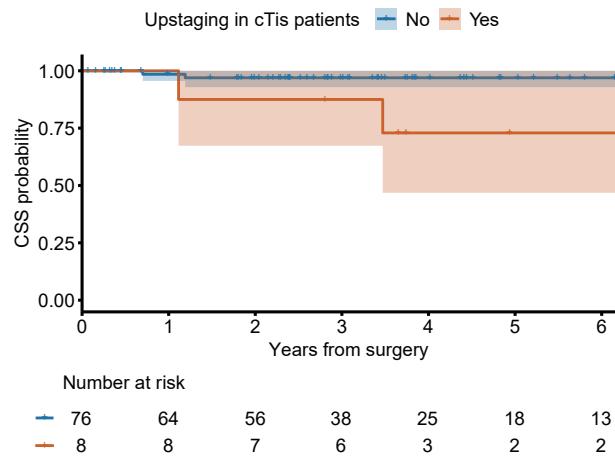
(b)



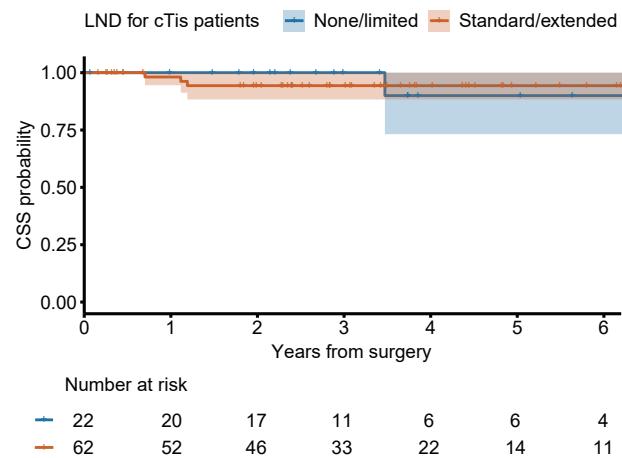
**Figure S2.** (a) SMDs for the balancing of covariates before and after IPTW in patients with cTa or cT1 disease, weighted according to the extent of LND. IPTW improved the covariate balance between groups. Among the 10 covariates, the adjusted SMDs for two covariates slightly exceeded the conventional threshold of 0.1, and those for three others were approximately 0.2. (b) Kaplan-Meier curves for CSS in patients with cT1 disease stratified by the extent of LND in the IPTW-adjusted cohort. SMDs, standardised mean differences; IPTW, inverse probability of treatment weighting; LND, lymph node dissection; CSS, cancer-specific survival. The average SMD for each covariate across the imputed datasets was below the conventional threshold of 0.1. SMDs, standardised mean differences; IPTW, inverse probability of treatment weighting; NAC, neoadjuvant chemotherapy; CSS, cancer-specific survival.

### Supplementary figure 3

(a)



(b)



**Figure S3.** The impact of upstaging and the effect of LND on CSS after RC for cTis disease.

Kaplan-Meier curves for CSS in patients with cTis disease stratified by the presence of upstaging at the time of RC (a) and the extent of LND (b). LND, lymph node dissection; CSS, cancer-specific survival; RC, radical cystectomy. across the imputed datasets was below the conventional threshold of 0.1. SMDs, standardised mean differences; IPTW, inverse probability of treatment weighting; NAC, neoadjuvant chemotherapy; CSS, cancer-specific survival.