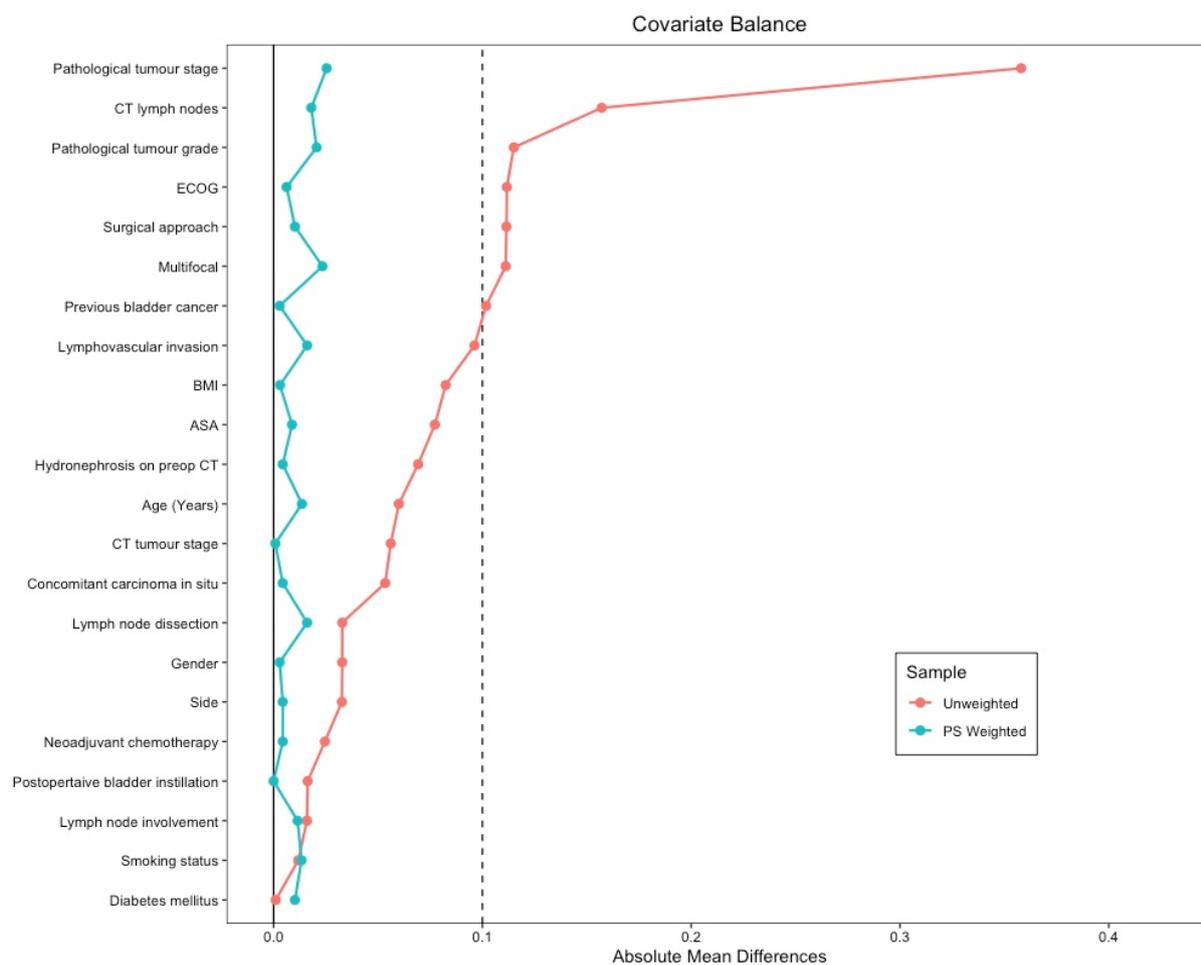
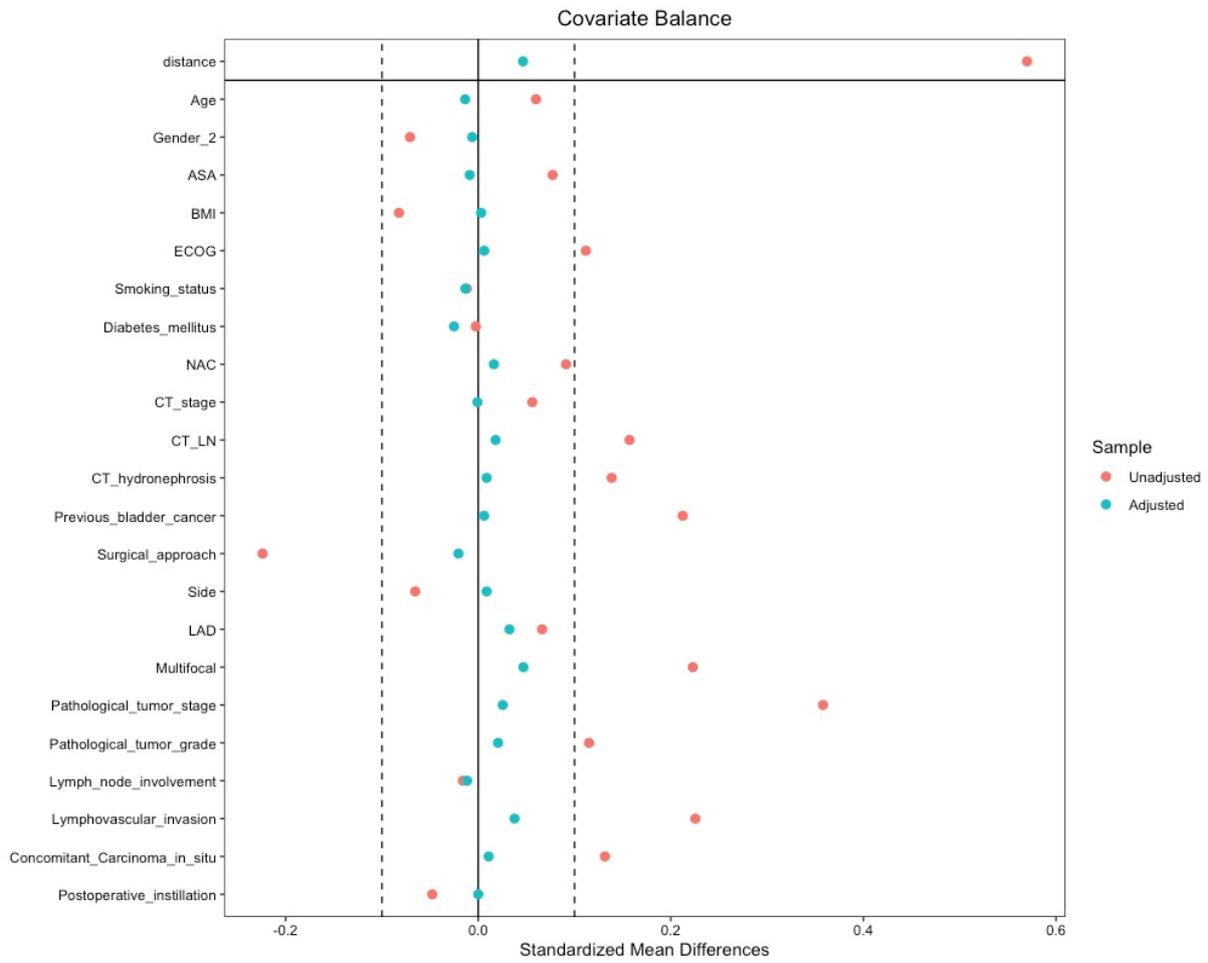


A



B



C

Variable	Observations per m			Total
	Complete	Incomplete	Imputed	
ASA	1481 (86.2%)	237 (13.8%)	237	1718
BMI	1451 (84.5%)	267 (15.5%)	267	1718
ECOG	1367 (79.6%)	351 (20.4%)	351	1718
Preoperative creatinine	1548 (90.1%)	170 (9.9%)	170	1718
CT lymph nodes	1480 (86.1%)	238 (13.9%)	238	1718
CT hydronephrosis	1538 (89.5%)	180 (10.5%)	180	1718
Previous bladder cancer	1661 (96.7%)	57 (3.3%)	57	1718
Multifocality	1709 (99.5%)	9 (0.5%)	9	1718
Postoperative instillation	1360 (79.2%)	358 (20.8%)	358	1718

D

Variable	Observations per m			Total
	Complete	Incomplete	Imputed	
ASA	1481 (86.2%)	237 (13.8%)	237	1718
BMI	1451 (84.5%)	267 (15.5%)	267	1718
ECOG	1367 (79.6%)	351 (20.4%)	351	1718
Smoking status	1579 (91.9%)	139 (8.1%)	139	1718
Diabetes mellitus	1340 (78.0%)	378 (22.0%)	378	1718
Preoperative creatinine	1548 (90.1%)	170 (9.9%)	170	1718
CT lymph nodes	1480 (86.1%)	238 (13.9%)	238	1718
CT hydronephrosis	1538 (89.5%)	180 (10.5%)	180	1718
Previous bladder cancer	1661 (96.7%)	57 (3.3%)	57	1718
Tumour side	1678 (97.7%)	40 (2.3%)	40	1718
Multifocality	1709 (99.5%)	9 (0.5%)	9	1718
Postoperative instillation	1360 (79.2%)	358 (20.8%)	358	1718
Transfusion	1572 (91.5%)	146 (8.5%)	146	1718

Figure S1. (A): Absolute mean differences of covariates before (red line) and after (green line) propensity score weighting. Threshold set at 0.1. **(B):** Standardized mean differences of covariates before (red dots) and after (green dots) propensity score weighting. Threshold set at 0.1. **(C):** Imputed variables for Cox proportional hazard regression analyses. **(D):** Imputed variables for logistic regression analyses.

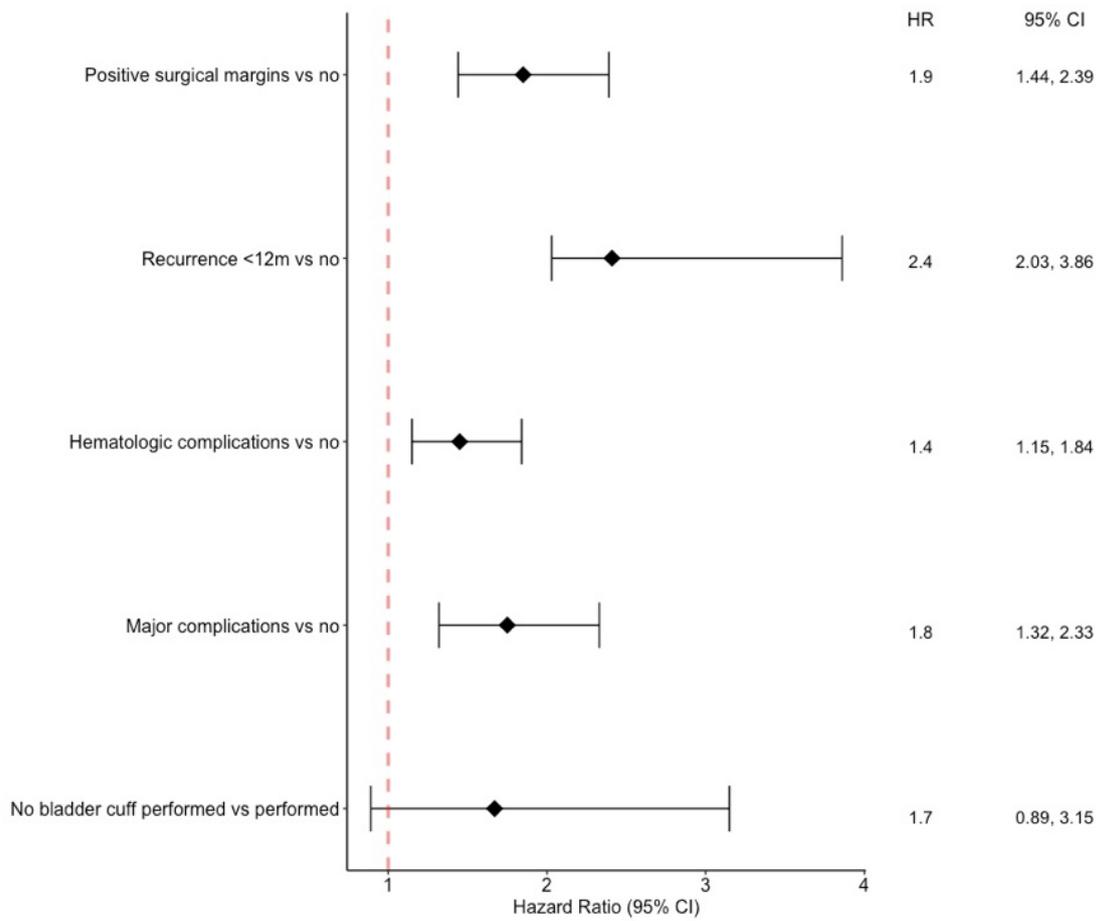


Figure S2. Weight of the particular pentafecta criteria on the overall survival of 1,016 propensity-score matched patients treated with RNU for high-risk UTUC. (HR=Hazard ratio; CI= confidence interval).

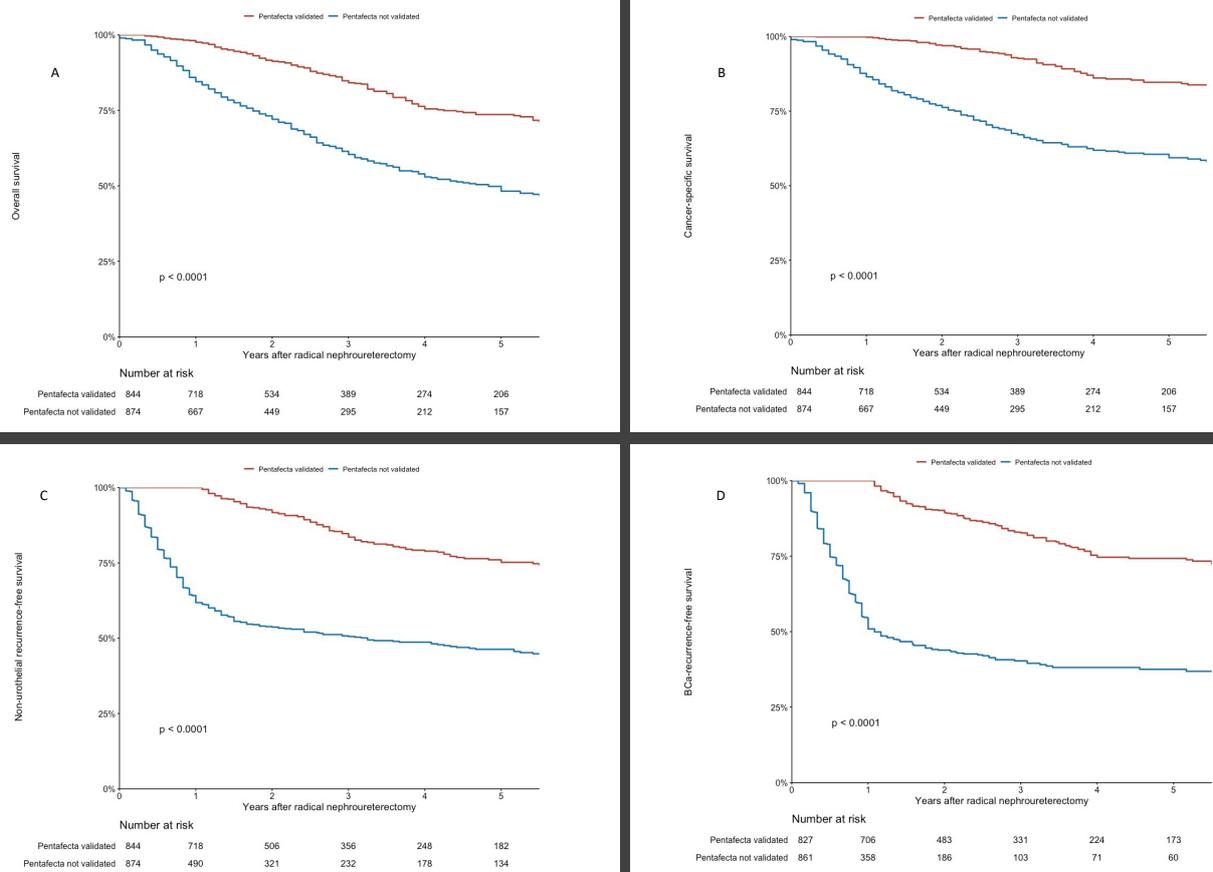


Figure S3. Oncologic outcomes of 1,718 patients treated with RNU for high-risk UTUC. Kaplan-Meier curves visualizing overall (A), cancer-specific (B), non-urothelial recurrence-free (C) and bladder-cancer recurrence-free survival (D).