

## Supplementary

**Table S1** Two-group multiple comparisons of treatment-related adverse events

TRAEs	P value of BRT vs. ICI + BRT	P value of ICI vs. ICI + BRT
Leukopenia	0.73	0.03
Neutropenia	0.77	0.004*
Hypoalbuminemia	0.007*	0.88
Abnormal thyroid function	<0.001*	0.22
Increased troponin	0.01*	0.09
≥3 TRAEs		
≥ grade 3 TRAEs	0.52	0.008*
Hematologic toxicity	0.91	0.025*
Neutropenia	0.69	0.06

, significant differences in two-group multiple comparisons ( $P \leq 0.025$ ). BRT, brain radiotherapy; ICI, immune checkpoint inhibitor; TRAEs, treatment-related adverse reactions.