



Figure S1 Axial and coronal images of the primary tumor and tumor thrombus pre- and post-NAT. Blue arrows indicate the primary tumor. Yellow arrows indicate the tips of the tumor thrombus. NAT, neoadjuvant therapy.

Table S1 Tumor sizes before and after neoadjuvant IO/TKI evaluated by CT images

Case	Before neoadjuvant IO/TKI		After neoadjuvant IO/TKI	
	ITT size	PT size	ITT size	PT size
1	30×29×25	84×82×82	10.5×34×29.5	54.5×50.5×49.5
2	28×19×15	131×100×94	0	116×96×83
3	60×28×21	82×90×76.5	77×25.5×17	75×79×66
4	32×35×23	68×63×56	19×22×17	60×56.5×46
5	215×51×50	58×46×40	139×36×26	59×48×48

Size: height × major axis × minor axis (mm). IO/TKI, immune-oncology/tyrosine kinase inhibitor; CT, computed tomography; ITT, inferior vena cava tumor thrombus; PT, primary tumor.

Table S2 Feasibility and safety assessed by peri- and post-operative outcomes

Case	Procedure	OT (min)	EBL (mL)	LOS (days)	Detail of complications	Recurrence site	Time to last follow-up from surgery (days)
1	ORNx	431	4,380	9	None	Lung	891
2	LRNx	259	90	9	None	None	742
3	ORNx	460	3,100	10	None	Para aorta LN	691
4	ORNx	332	1,060	14	None	None	570
5	ORNx	687	8,590	56	Lymphorrhea	Bone	633

OT, operation time; EBL, estimated blood loss; LOS, length of stay; ORNx, open radical nephrectomy; LRNx, laparoscopic radical nephrectomy; LN, lymph node.