

**Supplementary Table S1.** Primers and PCR conditions for SNP typing of polymorphic variants of *PDCD1* gene

Gene	SNP	RS	primer sequences	Restriction enzyme	PCR product (bp)	RFLP band pattern (bp)
<i>PDCD1</i>	<i>PD-1.5</i> C>T	rs2227981	5'-GTGCCTGTGTTCTCTGTGGA-3'	8 µL	212	C: 212
			5'-CCAAGAGCAGTGTCCATCCT-3'	Pvu II, 5U		T: 156+56
	<i>PD-1.3</i> G>A	rs11568821	5'-GCAGCAACCTCAATCCCTAA-3'	8µL	222	G: 333
			5'-AAATGTCCCTGGCATTCTTG-3'	Pst I , 5U		A: 51+282
	<i>PD-1.6</i> G>A	rs10204525	5'- CCTCACACCACTCGGGAGA-3'	8µL	301	G: 164+137
			5'-AGTGGGGGTGCAGTGTGT-3'	Nla III, 5U		A:301

SNP, single nucleotide polymorphism; *PDCD1*, *Programmed cell death protein 1*; RS, reference single nucleotide polymorphism identification number; RFLP, restriction fragment length polymorphism

**Supplementary Table S2.** Prognostic values of clinical variables and *PDCD1* polymorphism for predicting grade 2 or more irAE and multiple irAEs in 106 patients with metastatic renal cell carcinoma analyzed by using multivaluable logistic regression models

Factor	Risk category	At least one irAE ≥ G2			Multiple irAEs		
		OR	95% CI	p	OR	95% CI	p
Regimen	Nivo + Ipi				1.279	0.965 – 13.333	0.072
Clinical stage	3 ≤	2.183	0.645 – 7.392	0.210			
Nephrectomy	yes				0.800	0.223 – 2.866	0.731
<i>PDCD1</i> SNP	<i>PD-1.6 G allele</i>	<b>3.712</b>	<b>1.591 – 8.658</b>	<b>0.002</b>	<b>3.047</b>	<b>1.151 – 8.065</b>	<b>0.025</b>
<i>PDCD1</i> , Programmed cell death protein 1; SNP, single nucleotide polymorphism; irAE, immune-related adverse event; G, grade; OR, odds ratio; CI, confidence interval							