

Table 1 Demographics and clinical characteristics

		non-irAE	irAE	Total
No. of patients	All	42	14	56
	Female	17	3	20
	Male	25	11	36
Average age (years old)	All	40.86	31.64	38.55
	Female	44.82	42.66	44.5
	Male	38.16	28.63	35.25
Diagnosis (No. of patients)	Bone malignancy	28	9	37
	Bone benign tumor	2	1	3
	Soft tissue tumor	10	3	13
	Bone metastases	2	1	3
Immune checkpoint inhibitor	Anti-PD-1 antibody	24	3	27
	Anti-PD-L1 antibody	18	11	29

Table 2 irAE type and grade

Sex	Tumor Subtypes	Prior-regimen	irAE	Grade
Adult	Osteosarcoma	IFO-MTX-DDP+ADR 6 cycles	Immune related pancreatitis	3
Adolescent	Small cell osteosarcoma	VAC/IE	Immune related hepatitis	3
Adult	Pleomorphic sarcoma	A/I 3 cycles	Whole-body rashes with stench	3
Adult	Chondromatosis	A/I 3 cycles	Whole-body rashes with pruritus	3
Adult	Liposarcoma of bone	IFO-ADR2 2 cycles	Hyperglycemia and hypothyroidism	2
Adult	Mesenchymal chondrosarcoma	A/I 3 cycles	Hyperglycemia	1
Adult	Osteosarcoma	No prior-regimen	Rashes	1
Adolescent	Osteosarcoma	IFO-MTX-DDP+ADR 6 cycles	Rashes	1
Adolescent	Osteosarcoma	IFO-MTX-DDP+ADR 6 cycles	Hyperglycemia	1
Adult	Osteosarcoma	IFO-MTX-DDP+ADR 6 cycles	Hypertension	1
Adolescent	Osteosarcoma	IFO-MTX-DDP+ADR 6 cycles	Hyperglycemia	1
Adolescent	Osteosarcoma	IFO-MTX-DDP+ADR 6 cycles	Hyperglycemia	1
Adult	Giant cell tumor of bone	No prior-regimen	Hyperglycemia	1
Adolescent	Bone metastases	IFO-MTX-DDP+ADR 6 cycles	Hyperglycemia	1