

**Supplementary**

**Table S1** Comparison of ORR and DCR between patients with SCC and ADC

Outcome	SCC	ADC	P value*
Assessed, n	11	12	–
ORR, n (%)	5 (45.5)	1 (8.3)	0.069
DCR, n (%)	9 (81.8)	7 (58.3)	0.371

\*Fisher exact test between patients with SCC and ADC. SCC, squamous cell carcinoma; ADC, adenocarcinoma; ORR, objective response rate; DCR, disease control rate.

**Table S2** Detailed information of each patient

Patient No.	Age (years)	Gender	pathology	Primary tumor	Stage	Previous surgery times	Previous radiotherapy times	Previous chemotherapy cycles	Course of disease (months)	Local-F	Multi-M	Response	Apatinib dose (mg)	PFS (mo)	OS (mo)	Adverse events in grades III-IV
1	58	Male	SCC	Esophagus	IIB	1	3	4	59.6	Yes	Yes	PR	250	1.2	1.6	
2	86	Female	SCC	Neck skin	II	2	2	0	6.6	Yes	No	PR	125–250	4.4	4.7	Hand-foot syndrome
3	60	Male	SCC	Hypopharynx	III	1	1	8	17.3	Yes	No	PR	250	1	1	
4	32	Female	ADC	Breast	IIA	1	2	60	88.6	No	Yes	PR	250–500	5.4	5.4	
5	59	Male	SCC	Inner canthus	IV	7	1	11	40.6	Yes	No	PR	250–500	3.1	12	Thrombocytopenia and leukopenia
6	81	Female	SCC	Vulvar	IV	3	3	3	39.2	Yes	Yes	PR	250–500	1.8	3.5	Hypoglycemia and hypopotassemia
7	58	Male	SCC	Esophagus	IIIc	1	3	4	14.6	Yes	Yes	SD	125–250	0.9	1.2	
8	64	Male	SCC	Esophagus	IV	0	1	9	14.7	Yes	Yes	SD	125–250	2.8	2.8	
9	67	Female	SCC	Tongue	IVa	2	2	1	7.8	Yes	Yes	SD	125–250	2.7	2.8	Thrombocytopenia
10	38	Female	ADC	Ovary	IV	1	1	5	40.3	No	Yes	SD	250–500	2.7	4.7	Thrombocytopenia and hyperbilirubinemia
11	52	Male	SCC	Parotid gland	IVa	1	1	4	7	No	Yes	SD	250	0.7	1.7	
12	57	Female	ADC	Gastric	IV	1	0	10	14.2	No	Yes	SD	500	3.8	> 6.8	
13	58	Female	ADC	Pancreas	IV	1	0	9	12.5	No	Yes	SD	250	2.3	2.6	
14	57	Female	ADC	Gastric	IV	1	0	14	18.4	No	Yes	SD	250–500	>7.7	> 7.7	
15	65	Male	Sarcoma	Inguina	IIB	1	1	2	22.6	Yes	Yes	SD	250–500	>5.3	>5.3	Thrombocytopenia, anemia and leukopenia
16	58	Male	ADC	Gastric	IV	1	0	6	20.3	No	Yes	SD	500	2	>3.1	
17	32	Female	ADC	Oropharynx	II	1	0	2	27.2	No	Yes	SD	250–500	> 3.2	>3.2	
18	52	Male	ADC	Gastric	III	2	0	8	34.5	No	Yes	SD	500	1.8	2.5	Hyperbilirubinemia and elevated transaminase
19	48	Male	SCC	NPC	IV	0	6	4	10.1	No	Yes	PD	250	<1	5	Thrombocytopenia
20	65	Male	SCC	NPC	IV	0	1	4	10.4	No	Yes	PD	125–250	<1	1	
21	36	Female	ADC	Breast	II	0	4	21	85.2	No	Yes	PD	250	<1	1.7	
22	56	Male	ADC	Rectum	IV	1	1	5	8.3	No	Yes	PD	500	<1	2.4	
23	60	Male	ADC	Gastric	IV	1	0	21	17.7	No	Yes	PD	500	<1	3.2	Hyperbilirubinemia
24	48	Female	ADC	Breast	III	1	3	46	76	Yes	Yes	PD	500	<1	1	
25	28	Male	ADC	Gastric	IV	1	1	7	13.3	No	Yes	PD	500	<1	6.8	
26	68	Female	SCC	NPC	IVa	1	4	18	50.9	Yes	Yes	NE	250	NE	0.1	Sudden change
27	52	Female	ADC	Gastric	III	2	1	5	28.2	No	Yes	NE	250–500	NE	0.9	Sudden change
28	57	Female	Medullary	Breast	II	1	2	6	181.7	No	Yes	NE	250	NE	>5.8	Sudden change
29	50	Female	SCC	Cervix	IIIb	0	3	7	23.6	Yes	No	NE	250	NE	>6.1	Intolerable fatigue
30	47	Male	SCC	Oropharynx	IVa	0	1	3	9.8	Yes	No	NE	250	NE	>1.1	Intolerant fatigue and vertigo

SCC, squamous cell carcinoma; ADC, adenocarcinoma; Local-F, local failure; Multi-M, multiple metastases; NE, not evaluable; PFS, progression-free survival; OS, overall survival; PR, partial response; SD, stable disease; PD, progressive disease; >, patient alive at the time of analysis.