Table S1 *SKA1*-related clinical information form

Characteristics	Low expression of *SKA1* (n=252)	High expression of *SKA1* (n=252)	P value	Statistic	Method
Clinical T stage (n=489)			0.184627602	4.83063173	Chisq test
T1	15 (3.1)	18 (3.7)			
T2	67 (13.7)	79 (16.2)			
T3	61 (12.5)	70 (14.3)			
T4	101 (20.7)	78 (16.0)			
Clinical N stage (n=482)			0.000445075	15.4345346	Chisq test
N0	124 (25.7)	116 (24.1)			
N1	52 (10.8)	28 (5.8)			
N2 & N3	63 (13.1)	99 (20.5)			
Clinical M stage (n=479)			>0.99	2.8126E–31	Yates' correction
M0	237 (49.5)	237 (49.5)			
M1	3 (0.6)	2 (0.4)			
Gender (n=504)			0.313341395	1.01653893	Chisq test
Female	72 (14.3)	62 (12.3)			
Male	180 (35.7)	190 (37.7)			
Alcohol history (n=493)			0.157309531	1.99990052	Chisq test
No	87 (17.6)	72 (14.6)			
Yes	160 (32.5)	174 (35.3)			
Smoker (n=494)			0.785352608	0.07417474	Chisq test
No	55 (11.1)	58 (11.7)			
Yes	191 (38.7)	190 (38.5)			
Age (years) (n=503)			0.305416219	1.05039462	Chisq test
≤60	118 (23.5)	129 (25.6)			
>60	134 (26.6)	122 (24.3)			
Lymphovascular invasion (n=342)			0.349627601	0.87480829	Chisq test
No	118 (34.5)	102 (29.8)			
Yes	59 (17.3)	63 (18.4)			

Data are presented as n (%). *SKA*, spindle and kinetochore-associated.

Table S2 *SKA2*-related clinical information form

Characteristics	Low expression of *SKA2* (n=252)	High expression of *SKA2* (n=252)	P value	Statistic	Method
Clinical T stage (n=489)			0.906355771	0.55631629	Chisq test
T1	16 (3.3)	17 (3.5)			
T2	76 (15.5)	70 (14.3)			
T3	63 (12.9)	68 (13.9)			
T4	87 (17.8)	92 (18.8)			
Clinical N stage (n=482)			0.550435203	1.194092072	Chisq test
N0	122 (25.3)	118 (24.5)			
N1	41 (8.5)	39 (8.1)			
N2 & N3	74 (15.4)	88 (18.3)			
Clinical M stage (n=479)			0.996255727	2.20221E–05	Yates' correction
M0	236 (49.3)	238 (49.7)			
M1	3 (0.6)	2 (0.4)			
Gender (n=504)			0.313341395	1.016538927	Chisq test
Female	72 (14.3)	62 (12.3)			
Male	180 (35.7)	190 (37.7)			
Alcohol history (n=493)			0.652222701	0.203109334	Chisq test
No	82 (16.6)	77 (15.6)			
Yes	165 (33.5)	169 (34.3)			
Smoker (n=494)			0.119286621	2.426662606	Chisq test
No	49 (9.9)	64 (13.0)			
Yes	197 (39.9)	184 (37.2)			
Age (years) (n=503)			0.305416219	1.050394623	Chisq test
≤60	118 (23.5)	129 (25.6)			
>60	134 (26.6)	122 (24.3)			
Lymphovascular invasion (n=342)			0.45806891	0.550609131	Chisq test
No	112 (32.7)	108 (31.6)			
Yes	57 (16.7)	65 (19.0)			

Data are presented as n (%). *SKA*, spindle and kinetochore-associated.

Table S3 *SKA3*-related clinical information form

Characteristics	Low expression of *SKA3* (n=252)	High expression of *SKA3* (n=252)	P value	Statistic	Method
Clinical T stage (n=489)			0.08582046	6.59948763	Chisq test
T1	12 (2.5)	21 (4.3)			
T2	65 (13.3)	81 (16.6)			
T3	73 (14.9)	58 (11.9)			
T4	95 (19.4)	84 (17.2)			
Clinical N stage (n=482)			0.0375408	6.56465378	Chisq test
N0	126 (26.1)	114 (23.7)			
N1	46 (9.5)	34 (7.1)			
N2 & N3	68 (14.1)	94 (19.5)			
Clinical M stage (n=479)			0.98876732	0.00019821	Yates' correction
M0	239 (49.9)	235 (49.1)			
M1	2 (0.4)	3 (0.6)			
Gender (n=504)			0.68673179	0.16264623	Chisq test
Female	69 (13.7)	65 (12.9)			
Male	183 (36.3)	187 (37.1)			
Alcohol history (n=493)			0.19927256	1.64769781	Chisq test
No	86 (17.4)	73 (14.8)			
Yes	160 (32.5)	174 (35.3)			
Smoker (n=494)			0.51450728	0.42488956	Chisq test
No	53 (10.7)	60 (12.1)			
Yes	192 (38.9)	189 (38.3)			
Age (years) (n=503)			0.89420355	0.01768558	Chisq test
≤60	123 (24.5)	124 (24.7)			
>60	129 (25.6)	127 (25.2)			
Lymphovascular invasion (n=342)			0.19145589	1.70637867	Chisq test
No	119 (34.8)	101 (29.5)			
Yes	57 (16.7)	65 (19.0)			

Data are presented as n (%). *SKA*, spindle and kinetochore-associated.