

Supplementary Table 3. Correlation of peritumor GRK4 and clinicopathological characteristics in both cohorts

	Training Cohort					Validation Cohort				
	negative	1+	2+	3+	<i>P</i> -value	negative	1+	2+	3+	<i>P</i> -value
N	3	6	43	74		9	4	25	46	
Age	51.33 ± 11.37	51.67 ± 11.20	50.79 ± 8.43	50.03 ± 11.23	0.97	57.89 ± 9.89	52.75 ± 10.53	53.40 ± 11.24	53.33 ± 9.74	0.66
Tumor diameter	7.67 ± 2.31	7.17 ± 3.06	9.74 ± 4.01	8.39 ± 3.88	0.20	8.11 ± 4.55	3.38 ± 1.38	7.66 ± 4.33	7.90 ± 5.39	0.36
Status					0.65					0.79
Alive	2 (66.67%)	3 (50.00%)	15 (34.88%)	27 (36.49%)		4 (44.44%)	1 (25.00%)	11 (44.00%)	16 (34.78%)	
Dead	1 (33.33%)	3 (50.00%)	28 (65.12%)	47 (63.51%)		5 (55.56%)	3 (75.00%)	14 (56.00%)	30 (65.22%)	
Gender					0.82					0.58
Male	3 (100.00%)	5 (83.33%)	36 (83.72%)	65 (87.84%)		9 (100.00%)	3 (75.00%)	22 (88.00%)	41 (89.13%)	
Female	0 (0.00%)	1 (16.67%)	7 (16.28%)	9 (12.16%)		0 (0.00%)	1 (25.00%)	3 (12.00%)	5 (10.87%)	
Anatomic location					0.67					0.17
Left or other	1 (33.33%)	4 (66.67%)	18 (41.86%)	35 (47.30%)		1 (11.11%)	1 (25.00%)	7 (28.00%)	4 (8.70%)	
Right	2 (66.67%)	2 (33.33%)	25 (58.14%)	39 (52.70%)		8 (88.89%)	3 (75.00%)	18 (72.00%)	42 (91.30%)	
Number of tumors					0.36					0.26
Solitary	3 (100.00%)	3 (50.00%)	33 (76.74%)	52 (70.27%)		9 (100.00%)	4 (100.00%)	24 (96.00%)	39 (84.78%)	
Multiple	0 (0.00%)	3 (50.00%)	10 (23.26%)	22 (29.73%)		0 (0.00%)	0 (0.00%)	1 (4.00%)	7 (15.22%)	
Tumor type					0.24					0.37
Nodular	3 (100.00%)	2 (33.33%)	18 (41.86%)	34 (45.95%)		5 (55.56%)	4 (100.00%)	14 (56.00%)	25 (54.35%)	
Mass or diffuse	0 (0.00%)	4 (66.67%)	25 (58.14%)	40 (54.05%)		4 (44.44%)	0 (0.00%)	11 (44.00%)	21 (45.65%)	
Cirrhosis					0.17					0.09
No	0 (0.00%)	1 (16.67%)	22 (51.16%)	34 (45.95%)		4 (44.44%)	2 (50.00%)	20 (80.00%)	24 (52.17%)	
Yes	3 (100.00%)	5 (83.33%)	21 (48.84%)	40 (54.05%)		5 (55.56%)	2 (50.00%)	5 (20.00%)	22 (47.83%)	
Venous invasion					0.41					0.08
No	3 (100.00%)	3 (50.00%)	32 (74.42%)	51 (68.92%)		9 (100.00%)	4 (100.00%)	24 (96.00%)	36 (78.26%)	
Yes	0 (0.00%)	3 (50.00%)	11 (25.58%)	23 (31.08%)		0 (0.00%)	0 (0.00%)	1 (4.00%)	10 (21.74%)	
Grade					0.17					0.10

	1	2 (66.67%)	0 (0.00%)	5 (11.63%)	12 (16.22%)		3 (33.33%)	0 (0.00%)	2 (8.00%)	2 (4.35%)	
	2	1 (33.33%)	6 (100.00%)	32 (74.42%)	53 (71.62%)		6 (66.67%)	4 (100.00%)	19 (76.00%)	36 (78.26%)	
	3	0 (0.00%)	0 (0.00%)	6 (13.95%)	9 (12.16%)		0 (0.00%)	0 (0.00%)	4 (16.00%)	8 (17.39%)	
T Stage						0.67					0.55
	1	1 (33.33%)	2 (33.33%)	14 (32.56%)	25 (33.78%)		3 (33.33%)	3 (75.00%)	8 (32.00%)	17 (36.96%)	
	2	2 (66.67%)	1 (16.67%)	13 (30.23%)	14 (18.92%)		2 (22.22%)	0 (0.00%)	6 (24.00%)	7 (15.22%)	
	3	0 (0.00%)	3 (50.00%)	15 (34.88%)	31 (41.89%)		4 (44.44%)	1 (25.00%)	11 (44.00%)	17 (36.96%)	
	4	0 (0.00%)	0 (0.00%)	1 (2.33%)	4 (5.41%)		0 (0.00%)	0 (0.00%)	0 (0.00%)	5 (10.87%)	
GRK4 Tumor						0.05					0.26
	negative	0 (0.00%)	3 (50.00%)	19 (44.19%)	31 (41.89%)		5 (55.56%)	1 (25.00%)	9 (36.00%)	23 (50.00%)	
	1+	1 (33.33%)	1 (16.67%)	5 (11.63%)	18 (24.32%)		2 (22.22%)	2 (50.00%)	9 (36.00%)	6 (13.04%)	
	2+	1 (33.33%)	0 (0.00%)	8 (18.60%)	21 (28.38%)		0 (0.00%)	0 (0.00%)	2 (8.00%)	10 (21.74%)	
	3+	1 (33.33%)	2 (33.33%)	11 (25.58%)	4 (5.41%)		2 (22.22%)	1 (25.00%)	5 (20.00%)	7 (15.22%)	