

**Supplementary Table 6.** Relationship between immune-stroma signature and patient characteristics (n=359)

Characteristics		Class						Total (%)	$\chi^2$	P-value
		I	II	III	IV	V	VI			
Age, year	≤50	5	13	12	28	10	6	74 (20.6)	4.1	0.535
	>50	30	51	28	126	31	19	285 (79.4)		
Gender	Female	16	23	14	76	14	10	153 (42.6)	6.38	0.271
	Male	19	41	26	78	27	15	206 (57.4)		
HBsAg	Negative	24	42	20	120	28	18	252 (70.2)	12.99	0.024
	Positive	11	22	20	34	13	7	107 (29.8)		
AFP, ng/mL	≤20	33	54	33	138	34	25	317 (88.3)	8.19	0.146
	>20	2	10	7	16	7	0	42 (11.7)		
CA19-9, U/L	≤36	13	30	16	69	16	5	149 (41.5)	6.63	0.250
	>36	22	34	24	85	25	20	210 (58.5)		
GGT, U/L	≤36	19	32	22	66	18	15	172 (47.9)	4.79	0.442
	>36	16	32	18	88	23	10	187 (52.1)		
Liver cirrhosis	No	28	48	21	127	30	19	273 (76.0)	16.19	0.006
	Yes	7	16	19	27	11	6	86 (24.0)		
Tumor size, cm	≤5	23	26	19	57	20	14	159 (44.3)	12.06	0.034
	>5	12	38	21	97	21	11	200 (55.7)		
Tumor number	Single	39	48	31	105	34	11	258 (71.9)	16.15	0.006
	Multiple	6	16	9	49	7	14	101 (28.1)		
LVI	No	32	54	28	115	33	20	282 (78.6)	7.96	0.158
	Yes	3	10	12	39	8	5	77 (21.4)		
Lymphatic metastasis	No	31	54	36	130	32	23	306 (85.2)	3.74	0.587
	Yes	4	10	4	24	9	2	53 (14.8)		
Tumor encapsulation	Complete	5	12	13	24	5	3	62 (17.3)	8.34	0.138
	None	30	52	27	130	36	22	297 (82.7)		
Tumor differentiation	I+II	20	33	14	84	16	14	181 (50.4)	7.96	0.158
	III+IV	15	31	26	70	25	11	178 (49.6)		
TNM stage	I	26	37	20	71	21	7	182 (50.7)	15.55	0.008
	II+III+IV	9	27	20	83	20	18	177 (49.3)		

GGT, gamma glutamyl transferase; CA 19-9, carbohydrate antigen 19-9; LVI, lymphatic vascular invasion.