

# Prognostic role of HMGB1 for gallbladder cancer

**Table S1.** The association of HMGB1 expression with various clinicopathological characteristics of patients with AC gallbladder cancer

Clinicopathological characteristics	Total NO.	HMGB1		<i>P</i> value
		Positive No. (%)	$\chi^2$ value	
Gender				
Male	33	15 (45.5)	0.244	0.621
Female	47	24 (51.1)		
Age (Year)				
≤45	18	8 (44.4)	0.172	0.678
>45	62	31 (50.0)		
Differentiation grade				
Well-differentiated	30	11 (36.7)	0.858	0.651
Moderately-differentiated	27	13 (48.1)		
Poorly-differentiated	23	15 (65.2)		
Maximal tumor diameter (cm)				
≤3	49	19 (38.8)	5.035	0.025
>3	31	20 (64.5)		
Cholecystolithiasis				
No	36	17 (47.2)	0.061	0.805
Yes	44	22 (50.0)		
TNM stage				
I+II	29	11 (37.9)	2.439	0.295
III	38	20 (52.6)		
IV	13	8 (61.5)		
Lymph node metastasis				
No	34	15 (44.1)	0.508	0.476
Yes	46	24 (52.2)		
Regional invasion				
No	35	16 (45.7)	0.230	0.632
Yes	45	23 (51.1)		
Surgical method				
Radical	31	13 (41.9)	2.782	0.256
Palliative	27	12 (44.4)		
Without resection	22	14 (63.6)		
Her-2 expression				
Positive	30	16 (53.3)	0.404	0.525
Negative	50	23 (46.0)		
ER expression				
Positive	61	34 (55.7)	5.020	0.025
Negative	19	5 (26.3)		
PR expression				
Positive	59	29 (49.2)	0.015	0.904
Negative	21	10 (47.6)		
P53 expression				
Positive	64	32 (50.0)	0.200	0.655
Negative	16	7 (43.8)		
Ki-67 expression				
Positive	65	35 (53.8)	3.604	0.058
Negative	15	4 (26.7)		
Nm23 expression				
Positive	16	4 (31.3)	4.515	0.034
Negative	64	35 (53.1)		

## Prognostic role of HMGB1 for gallbladder cancer

**Table S2.** The association of HMGB1 expression with various clinicopathological characteristics of patients with SC/ASC gallbladder cancer

Clinicopathological characteristics	Total NO.	HMGB1		P value
		Positive No. (%)	$\chi^2$ value	
Gender				
Male	20	11 (55.0)		
Female	32	20 (62.5)	0.288	0.592
Age (Year)				
≤45	11	6 (54.5)		
>45	41	25 (63.4)	0.146	0.702
Differentiation grade				
Well-differentiated	19	8 (42.1)		
Moderately-differentiated	18	10 (55.6)	7.102	0.029
Poorly-differentiated	15	13 (86.7)		
Maximal tumor diameter (cm)				
≤3	32	15 (46.9)		
>3	20	16 (80.0)	5.609	0.018
Cholecystolithiasis				
No	24	14 (58.3)		
Yes	28	17 (60.7)	0.030	0.862
TNM stage				
I+II	15	6 (40.0)		
III	28	18 (64.3)	3.661	0.056
IV	9	7 (77.8)		
Lymph node metastasis				
No	21	9 (42.9)		
Yes	31	22 (71.0)	4.109	0.043
Regional invasion				
No	22	11 (50.0)		
Yes	30	20 (66.7)	1.464	0.226
Surgical method				
Radical	19	8 (42.1)		
Palliative	18	11 (61.1)	5.025	0.081
Without resection	15	12 (80.0)		
Her-2 expression				
Positive	21	13 (61.9)		
Negative	31	18 (58.1)	0.077	0.782
ER expression				
Positive	40	27 (67.5)		
Negative	12	4 (33.3)	4.390	0.036
PR expression				
Positive	38	23 (60.5)		
Negative	14	8 (57.1)	0.049	0.825
P53 expression				
Positive	42	25 (59.2)		
Negative	10	6 (60.0)	0.001	0.978
Ki-67 expression				
Positive	43	29 (67.4)		
Negative	9	2 (22.2)	6.199	0.013
Nm23 expression				
Positive	10	3 (30.0)		
Negative	42	28 (66.7)	4.424	0.035

## Prognostic role of HMGB1 for gallbladder cancer

**Table S3.** Univariate analysis of survival for 80 patients with AC gallbladder cancer

Characteristics	Category	No.	Average survival time (Month)	95% CI (Month)	P value
HMGB1 expression	Positive	39	9.5	6.3-12.7	<0.05
	Negative	41	20.1	13.9-26.3	
Maximal tumor diameter	≤3 cm	49	25.6	15.3-35.9	<0.05
	>3 cm	31	12.0	8.5-15.5	
TNM stage	I+II	29	30.6	23.2-38.0	<0.05
	III	38	11.1	7.3-14.9	
	IV	13	7.6	5.4-9.80	
Lymph node metastasis	No	34	18.1	12.6-23.6	<0.05
	Yes	46	9.7	5.5-13.9	
ER expression	Positive	61	17.5	12.0-23.0	<0.05
	Negative	19	10.5	6.2-14.8	
Ki-67 expression	Positive	65	10.3	6.1-14.5	<0.05
	Negative	15	17.9	12.1-23.7	
Nm23 expression	Positive	16	18.1	12.6-23.6	<0.05
	Negative	64	9.7	5.6-13.8	

**Table S4.** Multivariate Cox regression analysis of survival for 80 patients with AC gallbladder cancer

Characteristics	Category	Hazard ratio (HR)	95% CI	P value
HMGB1 expression	Positive	3.05	1.10-8.47	<0.05
	Negative			
Maximal tumor diameter	≤3 cm	1.58	0.84-3.20	<0.05
	>3 cm			
TNM stage	I+II	1.77	1.01-3.03	<0.05
	III			
	IV			
Lymph node metastasis	No	3.31	1.41-7.73	<0.05
	Yes			
Ki-67 expression	Positive	2.43	1.25-4.73	<0.05
	Negative			
Nm23 expression	Positive	2.86	1.14-6.36	<0.05
	Negative			

## Prognostic role of HMGB1 for gallbladder cancer

**Table S5.** Univariate analysis of survival for 52 patients with SC/ASC gallbladder cancer

Characteristics	Category	No.	Average survival time (Month)	95% CI (Month)	P value
HMGB1 expression	Positive	31	10.4	7.2-13.6	<0.05
	Negative	21	21.5	14.4-28.6	
Maximal tumor diameter	≤3 cm	32	24.4	14.1-34.7	<0.05
	>3 cm	20	13.2	8.9-17.5	
Differentiation degrade	Well-differentiated	19	29.5	22.7-36.3	<0.05
	Moderately-differentiated	18	11.4	7.9-14.9	
	Poorly-differentiated	15	6.7	4.3-9.1	
TNM stage	I+II	15	28.3	20.1-36.5	<0.05
	III	28	10.3	6.7-13.9	
	IV	9	7.4	5.1-9.7	
Lymph node metastasis	No	21	17.0	11.4-22.6	<0.05
	Yes	31	9.1	5.0-13.2	
Regional invasion	No	22	18.3	12.7-23.9	<0.05
	Yes	30	8.4	4.3-12.5	
ER expression	Positive	40	17.3	12.0-22.6	<0.05
	Negative	12	12.3	8.4-16.2	
Ki-67 expression	Positive	43	9.1	5.2-13.0	<0.05
	Negative	9	16.2	11.4-21.0	
Nm23 expression	Positive	10	16.3	10.3-22.3	<0.05
	Negative	42	8.5	4.3-12.7	

**Table S6.** Multivariate Cox regression analysis of survival for 52 patients with SC/ASC gallbladder cancer

Characteristics	Category	Hazard ratio (HR)	95% CI	P value
HMGB1 expression	Positive	3.09	1.19-8.06	<0.05
	Negative			
Differentiation degrade	Well-differentiated	3.20	1.08-9.83	<0.05
	Moderately-differentiated			
	Poorly-differentiated			
Maximal tumor diameter	≤3 cm	1.76	0.75-4.11	<0.05
	>3 cm			
TNM stage	I+II	1.65	0.65-1.65	<0.05
	III			
	IV			
Lymph node metastasis	No	3.25	1.37-7.72	<0.05
	Yes			
Ki-67 expression	Positive	2.30	1.12-4.74	<0.05
	Negative			
Nm23 expression	Positive	3.81	1.45-9.96	<0.05
	Negative			