

Supplementary Table 1 Assessed SNPs and their function

SNP	Gene	Function	Related Cancer Pathways	Supporting References
rs10740055	ARID5B	AT-rich DNA binding protein influencing transcription and epigenetic modifications	Proliferation, differentiation pathways (Childhood ALL, colorectal cancer risk)	[1, 2]
rs11168249	HDAC7	Histone deacetylase core protein regulating chromatin structure and gene expression	Tumor proliferation, metastasis, and drug resistance (Colorectal, lung cancers)	[3]
rs1137101	LEPR	Exonic mutation (Arg223Gln) influencing leptin signaling	promoting angiogenesis and proliferation, inhibiting apoptosis	[4]
rs2736100	TERT	Regulates telomerase activity, maintaining telomere length and cellular immortality	Telomere maintenance, cellular immortalization pathways in multiple cancers (lung, thyroid,	[5]

			glioma)	
rs3184504	SH2B3	immune response and proliferation regulation	Immunity, proliferation pathways; colorectal cancer risk	[6]
rs3130	PROM1	Mutation in stem cell marker affecting survival and migration	Cancer stemness, metastasis, prognosis in metastatic colorectal , liver cancers	[7, 8]
rs3748816	MMEL1	Metalloprotease-like enzyme mutation influencing cellular migration and inflammation	Inflammation, autoimmunity,	[9]
rs7528484	RUNX3	Regulates transcription and immune response, acts as a tumor suppressor	Enhances distal promoter activity	[10]

References:

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 10. Wang H, Wang J, Li D, Zhu Z, Pei D: **A functional polymorphism within the distal promoter of RUNX3 confers risk of colorectal cancer.** *Int J Biol Markers*

Supplementary Table 2 Genes and their single nucleotide polymorphism sequences

SNP	Gene	Location	Context Sequence[VIC/FAM]
rs10740055	ARID5B	Chr.10: 61958720	CTAGGAACCTTATACTTAGTTCAAAC[A/ C]CAGCTTTCCAAATAGAAACCCTGTG
rs11168249	HDAC7	Chr.12: 47814585	GGTGCTCCCCAAGCAAGGGAGTGGC[C/ T]TTGATCTTGGCCTTGTGCAGCTCCC
rs1137101	LEPR	Chr.1: 65592830	ATCACATCTGGTGGAGTAATTTTCC[A/ G]GTCACCTCTAATGTCAGTTCAGCCC
rs2736100	TERT	Chr.5: 1286401	GAAAAGCAGGGCGGGGGCAAAGCTA[A/C]AGAAACACTCAACACGGAAAACA AT
rs3184504	SH2B3	Chr.12: 111446804	TTGCTCCAGCATCCAGGAGGTCCGG[C/ T]GGTGCACACGGCTTGAGATGCCTGA
rs3130	PROM1	Chr.4: 15968315	GGGGGGAATGCCTACATCTGGAATT[C/ T]CATTACATCAACGTAAATTTTGTC
rs3748816	MMEL1	Chr.1: 2595307	GTACTCCTCGTCCAGGCGCCTGTTC[G/ A]TCTCCTCCAGGATGTAGTCAGGGTG
rs7528484	RUNX3	Chr.1: 24966177	CAGGCTGCGAGGCCCCAGGGTGGTGA[C /T]GCCAGCTTGTCTAAGGTCATGTGGT

ARID5B, AT-Rich Interaction Domain 5B; **HDAC7**, Histone Deacetylase 7; **LEPR**, Leptin Receptor; **MMEL1**, Membrane Metallo-Endopeptidase-Like 1; **PROM1**, Prominin 1 (also known as CD133); **RUNX3**, Runt-Related Transcription Factor 3; **SH2B3**, SH2B Adaptor Protein 3 (also known as LNK); **TERT**, Telomerase Reverse

Transcriptase.

Supplementary Table 3 Polymorphisms, genotypes, allele frequencies and Hardy-Weinberg Equilibrium in intrahepatic cholangiocarcinoma

ID	Gene	<i>Genotype</i>			<i>Allele</i>			<i>HWE</i>
		<i>G</i>	<i>n</i>	<i>%</i>	<i>A</i>	<i>n</i>	<i>%</i>	<i>p-value</i>
rs10740055	ARID5B	CC	27	24.1	C	112	50.5	0.63
		CA	58	51.8	A	110	49.5	
		AA	26	23.2				
rs11168249	HDAC7	TT	33	29.5	T	127	56.7	0.25
		TC	61	54.5	C	97	43.3	
		CC	18	16.1				
rs1137101	LEPR	AA	29	25.9	A	112	50.0	0.71
		AG	54	48.2	G	112	50.0	
		GG	29	25.9				
rs2736100	TERT	CC	31	27.7	C	106	51.0	0.12
		CA	44	39.3	A	102	49.0	
		AA	29	25.9				
rs3184504	SH2B3	TT	31	27.7	T	104	46.4	0.01
		TC	42	37.5	C	120	53.6	
		CC	39	34.8				
rs3130	PROM1	TT	23	20.5	T	80	40.8	0.01

		TC	34	30.4	C	116	59.2	
		CC	41	36.6				
rs3748816	MMEL1	AA	43	38.4	A	136	61.3	0.59
		AG	50	44.6	G	86	38.7	
		GG	18	16.1				
rs7528484		CC	32	28.6	C	118	52.7	0.73
	RUNX3	CT	54	48.2	T	108	47.3	
		TT	26	23.2				

ARID5B, AT-Rich Interaction Domain 5B; **HDAC7**, Histone Deacetylase 7; **LEPR**, Leptin Receptor; **MMEL1**, Membrane Metallo-Endopeptidase-Like 1; **PROM1**, Prominin 1 (also known as CD133); **RUNX3**, Runt-Related Transcription Factor 3; **SH2B3**, SH2B Adaptor Protein 3 (also known as LNK); **TERT**, Telomerase Reverse Transcriptase.

Supplementary Table 4 Patient characteristics in association with recurrence free survival, cancer specific survival and overall survival in intrahepatic cholangiocarcinoma

Variables	Recurrence free survival (RFS)		Cancer specific survival (CSS)		Overall survival (OS)	
	HR(95% CI)	p value	HR(95% CI)	p value	HR(95% CI)	p value
Sex(Male=1)	1.189(0.75 0-1.883)	0.46 2	0.825(0.51 3-1.326)	0.42 6	0.734(0.47 5-1.134)	0.16 4
Age(≤65=1)	0.877(0.55 7-1.380)	0.57 0	1.043(0.65 2-1.670)	0.86 0	1.241(0.80 4-1.914)	0.32 9

BMI($\leq 25=1$)	0.814(0.51 9-1.276)	0.36 9	0.982(0.61 3-1.574)	0.94 0	0.988(0.63 9-1.529)	0.95 8
ASA(I/II =1)	1.071(0.68 3-1.681)	0.76 4	1.317(0.82 0-2.117)	0.25 5	1.723(1.09 8-2.705)	0.01 8
Cholangitis(No=1)	0.042(0.00 1-1.727)	0.24 0	0.197(0.02 7-1.425)	0.10 8	0.465(0.14 5-1.491)	0.19 8
PVE(No=1)	1.295(0.51 9-3.234)	0.58 0	1.271(0.46 2-3.500)	0.62 4	1.702(0.73 7-3.928)	0.21 3
Neoadjuvant therapy(No=1)	2.194(1.04 3-4.617)	0.03 8	1.489(0.64 3-3.447)	0.35 3	1.311(0.59 7-2.877)	0.49 9
Albumin, g/dL($\leq 42=1$)	0.620(0.37 0-1.040)	0.13 5	0.529(0.30 5-0.916)	0.02 3	0.423(0.25 2-0.710)	0.00 1
AST, U/L($\leq 40=1$)	1.316(0.82 5-2.099)	0.25 0	1.470(0.91 3-2.367)	0.11 3	1.343(0.86 0-2.098)	0.19 4
ALT, U/L($\leq 40=1$)	0.933(0.54 7-1.591)	0.80 0	1.319(0.76 6-2.272)	0.31 7	1.181(0.71 0-1.964)	0.52 1
GGT, U/L($\leq 100=1$)	1.542(0.97 2-2.446)	0.06 6	1.678(1.03 6-2.717)	0.03 5	1.703(1.08 3-2.678)	0.02 1
Bilirubin, mg/dl($\leq 1=1$)	0.697(0.33 5-1.453)	0.33 6	1.205(0.61 6-2.359)	0.58 5	1.227(0.66 3-2.273)	0.51 5
Platelet count,1/nL($\leq 200=1$)	0.909(0.52 8-1.563)	0.72 9	0.782(0.45 2-1.355)	0.38 1	0.743(0.44 6-1.238)	0.25 5
AP, U/L($\leq 100=1$)	1.732(1.06 9-2.806)	0.02 6	1.804(1.08 3-3.006)	0.02 3	1.738(1.08 1-2.793)	0.02 3
Prothrombin time($\leq 110=1$)	0.815(0.51 6-1.287)	0.38 1	0.614(0.37 9-0.994)	0.04 7	0.649(0.41 4-1.016)	0.05 9

INR($\leq 1=1$)	1.295(0.81 3-2.063)	0.27 7	1.473(0.91 4-2.374)	0.11 1	1.554(1.00 1-2.413)	0.05 0
Hemoglobin,g/L($\leq 12=1$)	0.582(0.34 1-0.995)	0.04 8	0.471(0.27 0-0.823)	0.00 8	0.454(0.27 0-0.762)	0.00 3
CRP, mg/L($\leq 10=1$)	1.768(1.09 8-2.846)	0.01 9	2.227(1.37 0-3.618)	0.00 1	2.237(1.42 1-3.522)	< 0.00 1
Operative time, min($\leq 360=1$)	1.434(0.84 1-2.443)	0.18 5	1.568(0.91 1-2.699)	0.10 4	1.635(0.98 5-2.713)	0.05 7
Intraop PRBC (No =1)	1.775(1.08 8-2.896)	0.02 2	1.919(1.17 4-3.136)	0.00 9	1.758(1.11 1-2.783)	0.01 6
Intraop FFP(No =1)	1.673(1.04 0-2.691)	0.03 4	1.991(1.23 7-3.205)	0.00 5	1.866(1.19 9-2.905)	0.00 6
R status(R0=1)	1.400(0.81 4-2.410)	0.22 4	1.570(0.92 5-2.664)	0.10 5	1.418(0.86 2-2.333)	0.16 9
MVI(No=1)	3.917(1.40 7-10.908)	0.00 9	4.495(1.78 0-11.352)	0.00 1	3.690(1.46 9-9.271)	0.00 5
LVI(No=1)	2.992(1.65 7-5.404)	< 0.00 1	3.268(1.82 7-5.846)	< 0.00 1	3.402(1.98 3-5.839)	< 0.00 1
Tumor grading(G1/G2=1)	1.448(0.85 8-2.443)	0.16 5	1.969(1.16 9-3.317)	0.14 5	1.885(1.14 7-3.098)	0.01 2
Tumor stage UICC(I/II =1)	2.193(1.30 9-3.676)	0.00 3	2.624(1.54 8-4.448)	< 0.00 1	2.797(1.70 9-4.579)	< 0.00 1
pT category(pT1-2=1)	1.412(0.76	0.27	2.009(1.14	0.01	1.936(1.14	0.01

	0-2.623)	5	8-3.515)	5	3-3.278)	4
N category(pN0=1)	2.708(1.62	<	3.222(1.93	<	3.072(1.91	<
	7-4.506)	0.00	8-5.358)	0.00	1-4.940)	0.00
		1		1		1
ICU time,days(≤1=1)	0.973(0.53	0.93	1.295(0.70	0.40	1.309(0.74	0.35
	5-1.772)	0	6-2.372)	3	4-2.304)	0
Hospitalization,days(≤14	1.910(1.20	0.00	1.737(1.08	0.02	1.698(1.09	0.01
=1)	8-3.020)	6	0-2.792)	3	3-2.635)	8
Perioperative	1.957(1.23	0.00	1.874(1.15	0.01	1.777(1.13	0.01
complications (Clavien-	4-3.105)	4	5-3.040)	1	3-2.786)	2
Dindo)(0/I/II =1)						
Adjuvant therapy(No=1)	1.213(0.76	0.40	1.070(0.65	0.78	0.880(0.55	0.59
	9-1.914)	7	6-1.745)	6	0-1.407)	3

ASA, American Society of Anesthesiology; BMI, Body mass index; FFP, fresh frozen plasma; HR, hazard ratio; LVI, lymph vascular invasion; MVI, microvascular invasion;PRBC, packed red blood cells.

Supplementary Table 5 Assessment of the Proportional Hazards Assumption

Cohort	Endpoint	Variable	r	p-value	PH assumption
iCCA	RFS	LVI	-0.108	0.352	fulfilled
iCCA	RFS	Hb_grp	-0.023	0.847	fulfilled
iCCA	RFS	rs10740055	-0.128	0.275	fulfilled
iCCA	CSS	Hb_grp	-0.058	0.642	fulfilled
iCCA	CSS	N1	-0.261	0.037	mild deviation
iCCA	CSS	rs10740055	-0.165	0.193	fulfilled
iCCA	OS	Neoadjuvant CTx	0.021	0.860	fulfilled
iCCA	OS	LVI	0.064	0.598	fulfilled
iCCA	OS	rs10740055	-0.029	0.813	fulfilled

pCCA	RFS	Hb_grp	-0.071	0.591	fulfilled
pCCA	RFS	FFP_grp	0.326	0.012	moderate deviation
pCCA	RFS	M	-0.112	0.401	fulfilled
pCCA	RFS	G_grp	-0.070	0.601	fulfilled
pCCA	RFS	T_grp	-0.108	0.422	fulfilled
pCCA	RFS	N1	-0.247	0.061	fulfilled (trend)
pCCA	CSS	Hb_grp	0.090	0.492	fulfilled
pCCA	CSS	FFP_grp	0.096	0.472	fulfilled
pCCA	CSS	M	-0.013	0.920	fulfilled
pCCA	CSS	G_grp	0.073	0.581	fulfilled
pCCA	CSS	T_grp	-0.161	0.223	fulfilled
pCCA	CSS	N1	-0.203	0.122	fulfilled
pCCA	OS	Hb_grp	0.029	0.822	fulfilled
pCCA	OS	FFP_grp	-0.126	0.332	fulfilled
pCCA	OS	M	-0.028	0.828	fulfilled
pCCA	OS	G_grp	-0.056	0.667	fulfilled
pCCA	OS	T_grp	-0.225	0.081	fulfilled (trend)
pCCA	OS	N1	-0.225	0.081	fulfilled (trend)

PH assumption was evaluated by correlating partial residuals of each covariate with ranked survival time. A significant correlation ($p < 0.05$) indicates potential time dependency. No relevant violations were observed for the main genetic variable (rs10740055).

Supplementary Table 6 Events per variable (EPV) in multivariable Cox models

Cohort	Endpoint	Events(n)	Model parameters(df)	EPV
iCCA	RFS	71	3	23.7
iCCA	CSS	64	3	21.3
iCCA	OS	75	3	25.0
pCCA	RFS	61	5	12.2

pCCA	CSS	59	6	9.8
pCCA	OS	84	7	12.0

Supplementary Table 7 Sensitivity analysis using reduced multivariable Cox regression models

Cohort	Endpoint	Variable	Model	HR (95% CI)	p value
iCCA	RFS	rs10740055	Full	2.413(1.311-4.440)	0.005
iCCA	RFS	rs10740055	Reduced	2.122(1.240-3.631)	0.006
iCCA	RFS	LVI	Full	3.749(1.895-7.418)	< 0.001
iCCA	RFS	LVI	Reduced	3.098(1.704-6.633)	< 0.001
iCCA	CSS	rs10740055	Full	2.265(1.137-4.513)	0.020
iCCA	CSS	rs10740055	Reduced	1.991(1.148-3.451)	0.014
iCCA	CSS	N category	Full	3.562(1.802-7.041)	< 0.001
iCCA	CSS	N category	Reduced	3.315(1.986-5.532)	< 0.001
iCCA	OS	rs10740055	Full	4.095(1.966-8.529)	< 0.001
iCCA	OS	rs10740055	Reduced	2.393(1.432-4.000)	< 0.001
iCCA	OS	LVI	Full	5.524(2.600-11.738)	< 0.001
iCCA	OS	LVI	Reduced	3.639(2.100-6.307)	< 0.001
pCCA	RFS	Tumor grading	Full	3.740(1.711-8.177)	< 0.001

pCCA	RFS	Tumor grading	Reduced	2.224(1.181-4.190)	0.013
pCCA	RFS	N category	Full	2.704(1.476-4.954)	0.001
pCCA	RFS	N category	Reduced	1.965(1.142-3.379)	0.015
pCCA	CSS	Tumor grading	Full	4.637(2.109-10.193)	< 0.001
pCCA	CSS	Tumor grading	Reduced	2.270(1.201-4.291)	0.012
pCCA	CSS	N category	Full	2.524(1.374-4.634)	0.003
pCCA	CSS	N category	Reduced	2.134(1.227-3.711)	0.007
pCCA	OS	Tumor grading	Full	3.699(1.879-7.284)	< 0.001
pCCA	OS	Tumor grading	Reduced	2.570(1.485-4.449)	< 0.001
pCCA	OS	N category	Full	1.779(1.055-2.998)	0.031
pCCA	OS	N category	Reduced	1.530(0.949-2.467)	0.081

Abbreviations: RFS, recurrence-free survival; CSS, cancer-specific survival; LVI, lymph vascular invasion ;OS, overall survival.

Supplementary Table 8 Polymorphisms, genotypes, allele frequencies and Hardy-Weinberg Equilibrium in perihilar cholangiocarcinoma

ID	Gene	Genotype			Allele			HWE <i>p</i> -value
		G	n	%	A	n	%	<i>p</i>
rs10740055	ARID5	CC	32	27.4	C	117	50.0	0.31

	B	CA	53	45.3	A	117	50.0	
		AA	32	27.4				
rs11168249	HDAC	TT	46	39.3	T	136	58.6	0.02
	7	TC	44	37.6	C	96	41.4	
		CC	26	22.2				
rs1137101	LEPR	AA	34	29.1	A	126	53.9	0.98
		AG	58	49.6	G	108	46.1	
		GG	25	21.4				
rs2736100	TERT	CC	38	32.5	C	111	51.4	0.01
		CA	35	29.9	A	105	48.6	
		AA	35	29.9				
rs3184504	SH2B3	TT	28	23.9	T	113	48.3	0.79
		TC	57	48.7	C	121	51.7	
		CC	32	27.4				
rs3130	PROM	TT	34	29.1	T	113	53.8	0.16
	1	TC	45	38.5	C	97	46.2	
		CC	26	22.2				
rs3748816	MMEL	AA	50	42.7	A	155	66.2	0.58
	1	AG	55	47.0	G	79	33.8	
		GG	12	10.3				
rs7528484		CC	36	30.8	C	136	58.1	0.18
	RUNX3	CT	64	54.7	T	98	41.9	
		TT	17	14.5				

ARID5B, AT-Rich Interaction Domain 5B; **HDAC7**, Histone Deacetylase 7; **LEPR**,

Leptin Receptor; **MMEL1**, Membrane Metallo-Endopeptidase-Like 1; **PROM1**, Prominin 1 (also known as CD133); **RUNX3**, Runt-Related Transcription Factor 3; **SH2B3**, SH2B Adaptor Protein 3 (also known as LNK); **TERT**, Telomerase Reverse Transcriptase.

Supplementary Table 9 Patient characteristics in association with recurrence free survival, cancer specific survival and overall survival in perihilar cholangiocarcinoma

Variables	Recurrence free survival(RFS)		Cancer specific survival(CSS)		Overall survival(OS)	
	HR(95% CI)	p value	HR(95% CI)	p value	HR(95% CI)	p value
Sex(Male=1)	1.096(0.649-1.851)	0.732	1.241(0.735-2.095)	0.419	1.291(0.834-1.997)	0.252
Age(≤65=1)	0.700(0.427-1.148)	0.158	1.087(0.654-1.807)	0.748	1.332(0.863-2.056)	0.196
BMI(≤25=1)	1.366(0.833-2.242)	0.216	1.105(0.669-1.827)	0.696	1.217(0.791-1.855)	0.360
ASA(I/II =1)	1.209(0.733-1.996)	0.457	1.413(0.840-2.368)	0.190	1.427(0.920-2.202)	0.108
Cholangitis(No=1)	1.482(0.861-2.551)	0.156	1.397(0.810-2.408)	0.229	1.368(0.863-2.173)	0.184
PVE(No=1)	0.933(0.533-1.573)	0.795	0.945(0.557-1.603)	0.833	0.889(0.570-1.386)	0.604
Neoadjuvant therapy(No=1)	0.792(0.193-3.243)	0.746	0.863(0.210-3.542)	0.838	1.194(0.436-3.265)	0.730

Albumin, g/dL(≤42=1)	0.565(0.26 7-1.192)	0.13 4	0.606(0.27 3-1.343)	0.21 7	0.881(0.49 3-1.577)	0.67 0
AST, U/L(≤40=1)	1.574(0.93 1-2.661)	0.09 0	1.241(0.73 9-2.084)	0.41 4	1.047(0.68 3-1.606)	0.83 2
ALT, U/L(≤40=1)	0.867(0.45 4-1.653)	0.66 4	0.809(0.42 2-1.550)	0.52 3	0.743(0.43 1-1.280)	0.28 4
GGT, U/L(≤100=1)	1.187(0.42 9-3.283)	0.74 1	2.365(0.57 6-9.710)	0.23 2	1.363(0.55 0-3.374)	0.50 4
Bilirubin, mg/dl(≤1=1)	1.395(0.84 9-2.293)	0.18 9	1.168(0.70 6-1.932)	0.54 5	1.102(0.72 3-1.679)	0.65 2
Platelet count,1/nL(≤200=1)	1.651(0.66 1-4.124)	0.28 3	0.957(0.43 5-2.107)	0.91 3	0.871(0.46 2-1.643)	0.67 1
AP, U/L(≤100=1)	1.577(0.49 2-5.052)	0.44 3	2.351(0.57 2-9.659)	0.23 6	1.342(0.54 2-3.327)	0.52 5
Prothrombin time(≤110=1)	0.771(0.45 6-1.305)	0.33 3	0.610(0.34 8-1.071)	0.08 5	0.781(0.49 7-1.230)	0.28 6
INR(≤1=1)	1.606(0.96 1-2.684)	0.07 1	1.860(1.08 9-3.178)	0.02 3	1.386(0.90 0-2.134)	0.13 9
Hemoglobin,g/L(≤12=1)	0.430(0.26 1-0.710)	< 0.00 1	0.522(0.31 3-0.869)	0.01 2	0.487(0.31 8-0.747)	< 0.00 1
CRP, mg/L(≤10=1)	1.003(0.60 1-1.673)	0.99 2	1.014(0.60 3-1.707)	0.95 7	1.128(0.73 1-1.740)	0.58 6
Operative time,min(≤360=1)	2.150(1.13 9-4.059)	0.01 8	1.814(0.97 7-3.367)	0.05 9	1.331(0.82 7-2.142)	0.23 8
Intraop PRBC (No =1)	1.836(1.11	0.01	2.186(1.31	0.00	2.409(1.56	<

	3-3.028)	7	3-3.638)	3	4-3.709)	0.00
						1
Intraop FFP(No =1)	2.032(1.21	0.00	2.878(1.63	<	2.506(1.58	<
	2-3.407)	7	9-5.055)	0.00	4-3.963)	0.00
				1		1
R status(R0=1)	1.331(0.76	0.30	1.133(0.63	0.67	1.333(0.83	0.23
	8-2.307)	9	0-2.038)	6	0-2.142)	4
MVI(No=1)	4.379(1.05	0.04	6.222(1.48	0.01	4.247(1.02	0.04
	3-18.209)	2	0-26.154)	3	5-17.601)	6
LVI(No=1)	2.020(1.13	0.01	1.870(1.02	0.04	2.089(1.27	0.00
	5-3.595)	7	0-3.428)	3	7-3.419)	3
Tumor	2.899(1.59	<	3.105(1.70	<	3.090(1.85	<
grading(G1/G2=1)	4-5.272)	0.00	6-5.652)	0.00	6-5.145)	0.00
		1		1		1
Tumor stage UICC(I/II	1.906(1.10	0.02	2.122(1.21	0.00	1.612(1.02	0.04
=1)	1-3.298)	1	5-3.705)	8	3-2.539)	0
pT category(pT1-2=1)	1.932(1.15	0.01	2.269(1.35	0.00	1.881(1.21	0.00
	5-3.233)	2	4-3.802)	2	1-2.924)	5
N category(pN0=1)	2.233(1.35	0.00	2.418(1.45	<	1.813(1.18	0.00
	3-3.684)	2	6-4.017)	0.00	1-2.784)	7
				1		
ICU time,days(≤1=1)	1.611(0.96	0.07	1.693(1.00	0.05	1.690(1.08	0.02
	0-2.703)	1	0-2.868)	0	4-2.636)	1
Hospitalization,days(≤14	1.137(0.68	0.61	1.493(0.88	0.13	1.405(0.91	0.12
=1)	9-1.876)	5	8-2.511)	1	2-2.165)	3
Perioperative	1.580(0.96	0.07	1.731(1.04	0.03	1.858(1.21	0.00
complications (Clavien-						

Dindo)(0/I/II =1)	1-2.598)	1	5-2.868)	3	5-2.841)	4
Adjuvant therapy(No=1)	1.740(1.01	0.04	1.265(0.71	0.42	1.246(0.75	0.38
	5-2.985)	4	4-2.240)	1	6-2.054)	7

ASA, American Society of Anesthesiology; BMI, Body mass index; CSS, cancer-specific survival; FFP, fresh frozen plasma; HR, hazard ratio; LVI, lymph vascular invasion; MVI, microvascular invasion; OS, Overall Survival; PRBC, packed red blood cells; RFS, recurrence free survival.