

Supplementary Table 1 Clinical and laboratory indices of acute pancreatitis patient

Index	<i>n</i> = 899
Preventing chronic disease	592 (65.9)
Aperitoneal lavage	95 (10.6)
Blood test within 3 days of onset	<i>n</i> = 899
Blood leukocytes (10 ⁹ /L)	12.0 (8.7–16.0)
Missing	178 (19.8)
Hemoglobin (g/L)	123.0 (106.0-142.0)
Missing	178 (19.8)
Total serum bilirubin (umol/L)	17.9 (12.1-30.1)
Missing	25 (2.8)
Serum albumin (g/L)	32.0 (29.0-35.4)
Missing	98 (10.9)
Serum LDH (U/L)	546.5 (347.8-918.3)
Missing	107 (11.9)
Serum amylase (U/L)	337.0 (130.0-727.0)
Serum C-reactive protein (mg/L)	207.0 (134.0-308.0)
Missing	161 (17.9)
Serum procalcitonin (ng/L)	2.2 (0.8-8.1)
Missing	227 (25.3)
Ascites test within 1 week of onset	<i>n</i> = 667
Yellow clear ascites	54 (8.1)
Yellow cloudy ascites	293 (43.9)
Red brown bloody ascites	320 (48.0)
Positive for ascites bacteria	65 (9.7)
Number of ascites cells (number)	252 (26-4000)
Proportion of neutrophils in ascites (%)	85 (9-92)
Total ascites protein (g/L)	34.8 (23.9-41.0)

Ascites amylase (U/L)	572.0 (98.5-2191.5)
Ascites LDH (U/L)	1192.0 (297.0-2654.2)

LDH: Lactate dehydrogenase.

Supplementary Table 2 Predictive value of ascites laboratory results for acs and intra-abdominal hemorrhage

	Area under the receiver operating characteristic curve (95CI%)	Sensitivity	Specificity	Positive likelihood ratio	Negative likelihood ratio	Cut off value	Significance
Predicting abdominal compartment syndrome							
Cell count in ascites	0.50 (0.40-0.60)	93	18	1.13	0.39	2.50	0.953
Percentage of neutrophils	0.55 (0.46-0.65)	90	28	1.24	0.37	8.50	0.343
Total protein	0.64 (0.55-0.74)	93	38	1.50	0.18	28.55	0.012
Amylase	0.60 (0.51-0.69)	97	29	1.36	0.12	68.50	0.085
LDH	0.79 (0.70-0.88)	79	79	3.82	0.26	2404.5	< 0.001
Predicting intra-abdominal hemorrhage							
Cell count in ascites	0.43 (0.25-0.60)	100	3.9	1.04	0.00	0.50	0.428
Percentage of neutrophils	0.59 (0.38-0.80)	50	76	2.10	0.66	94.50	0.331
Total protein	0.42 (0.24-0.60)	10	100	25.00	0.90	62.60	0.414

Amylase	0.54 (0.40-0.68)	100	29	1.41	0.00	163.50	0.674
LDH	0.77 (0.65-0.90)	80	74	3.06	0.27	2436.00	0.003

LDH: Lactate dehydrogenase.

Supplementary Table3 Analysis of characteristics of ascites in patients with different acute pancreatitis etiologies

Indicators	Hypertriglyceridemia (<i>n</i> = 178)	Alcoholic (<i>n</i> = 75)	Biliary (<i>n</i> = 327)	Others (<i>n</i> = 87)	<i>P</i> value
Cell count in ascites	43 (11-228)	46 (11-532)	59 (15-256)	156 (45-2860)	0.689
Percentage of neutrophils	75 (9-90)	85 (9-92)	80 (9-95)	25 (2-91)	0.042
Total protein	36 (32-43)	32 (4-38)	33 (19-39)	36 (24-47)	0.006
Amylase	686 (77-2139)	722 (62-2225)	763 (150-3006)	752 (132-2329)	0.871
Lactate dehydrogenase	2257 (357-3769)	916 (422-2445)	933 (252-1760)	988 (252-2745)	0.001

Supplementary Table 4 Univariable and multivariate logistic regression analyses

Indicators	Univariable regression analyses	logistic <i>P</i> value	Multivariate logistic regression analyses	<i>P</i> value
	OR (95%CI)		OR (95%CI)	
Abdominal compartment syndrome				
Etiology				
Hypertriglyceridemia	Reference			
Alcoholic	0.942 (0.428-2.072)	0.881	2.037 (0.670-6.192)	0.210
Biliary	0.378 (0.202-0.707)	0.002	0.425 (0.169-1.066)	0.068
Others ¹	0.219 (0.064-0.745)	0.015	0.436 (0.114-1.658)	0.223
Comorbidities				

Hypertension	1.319 (0.709-2.453)	0.382	-	-
Diabetes	1.497 (0.677-3.309)	0.319	-	-
Hyperlipemia	1.237 (0.538-2.848)	0.616	-	-
Percentage of neutrophils	0.999 (0.992-1.006)	0.781	-	-
Total protein	1.022 (1.001-1.044)	0.041	1.033 (1.001-1.066)	0.045
LDH	1.000 (1.000-1.000)	0.014	1.000 (1.000-1.000)	0.031
Intra-abdominal hemorrhage				
Etiology				
Hypertriglyceridemia	Reference			
Alcoholic	0.418 (0.026-6.773)	0.539	-	-
Biliary	0.916 (0.101-8.319)	0.938	-	-
¹ Others	0.860 (0.053-13.998)	0.916	-	-
Comorbidities				
Hypertension	9.286 (1.783-48.370)	0.008	14.623 (1.424-150.107)	0.024
Diabetes	0.000 (0.000-0.000)	0.997	-	-
Hyperlipemia	0.000 (0.000-0.000)	0.997	-	-
Percentage of neutrophils	0.989 (0.970-1.007)	0.221	0.989 (0.965-1.012)	0.341
Total protein	0.976 (0.928-1.027)	0.347	0.967 (0.912-1.025)	0.262
LDH	1.000 (1.000-1.000)	0.602	1.000 (1.000-1.000)	0.203

¹Other etiology include idiopathic, medication, surgery, trauma, post-endoscopic retrograde cholangiopancreatography, and structural abnormalities of the pancreatic duct.

LDH lactate dehydrogenase; OR: Odds ratio.