

Supplementary Table 3. Clinical and laboratory data at ACLF diagnosis, clinical course, and mortality in patients with and without proved bacterial infection at diagnosis or during follow-up#

	Proved bacterial infection at ACLF diagnosis (n=136)	No proved bacterial infection at ACLF diagnosis (n=271)	Proved bacterial infection during follow-up## (n=99)	No proved bacterial infection during follow-up## (n=156)
Cause of admission				
GI Bleeding	5(6.8)	28(19.7)*	11(20.8)	15(19.0)
Infection	28(37.8)	28(19.7)**	16(30.2)	9(11.4)**
Encephalopathy	9(12.2)	34(23.9)	15(28.3)	15(22.8)
HRS	1(1.4)	8(5.6)	0(0.0)	7(8.9)
Ascites	16(21.6)	30(21.1)	7(13.2)	20(25.3)
Other	15(20.3)	14(9.9)*	4(7.6)	10(12.7)
Clinical and laboratory data				
Age (years)	56±12	56±11	54±11	57±11
Alcoholic cirrhosis (%)	70(52.2)	158(61.7)	56(61.5)	92(61.3)
No prior decompensation (%)	40(30.8)	56(22.1)	23(24.2)	30(21.0)
Ascites with surrogates (%)	132(97.1)	267(98.5)	98(99.0)	154(98.7)
Encephalopathy (%)	75(62.0)	119(50.4)*	52(59.1)	59(44.4)*
WBC (x10 ⁹ /L)	9.6(6.0-15.1)	6.9(4.9-12.1)**	7.5(5.0-13.2)	6.5(4.6-10.8)
Serum CRP (mg/L)	36(21-78)	25(11-48)***	30(16-51)	20(9-42)*
Serum bilirubin (mg/dL)	6.0(3.0-13.7)	8.8(2.7-19.8)	11.0(2.5-22.1)	7.7(2.6-17.0)
INR	1.9(1.5-2.7)	1.9(1.5-2.6)	2.0(1.5-2.5)	1.8(1.4-2.6)
Serum creatinine (mg/dL)	1.7(1.0-2.5)	1.9(1.0-2.6)	2.0(1.1-3.0)	1.8(0.9-2.4)
Plasma sodium (mEq/L)	134±7	135±6	135±6	134±6
Serum albumin	2.8(2.4-3.1)	2.9(2.5-3.4)	2.9(2.6-3.3)	2.9(2.4-3.5)
Renal failure (%)	64(51.6)	120(51.3)	46(54.1)	66(48.9)
Cerebral failure (%)	38(31.2)	42(17.9)**	22(25.3)	1.6(11.9)*
Respiratory failure (%)	22(20.2)	21(11.1)*	12(17.4)	6(5.6)*
Circulatory failure (%)	39(33.1)	45(19.5)**	15(18.1)	24(17.9)
Coagulation failure (%)	44(37.0)	73(32.2)	22(26.8)	43(32.8)
Liver failure (%)	40(32.8)	101(43.5)*	38(45.2)	55(41.4)
MELD score	28±7	28±7	28±7	27±7
CLIF-C ACLF score	53±10	49±9***	50±8	47±9
NASCELD criteria for ACLF\$	21(15.4)	23(8.5)*	14(14.1)	8(5.1)*
ACLF-1(%)	67(49.3)	137(50.6)	43(43.4)	90(57.7)**
ACLF-2(%)	45(33.1)	102(37.6)	38(38.4)	57(36.5)
ACLF-3(%)	24(17.6)	32(11.8)	18(18.2)	9(5.8)
Inflammatory cytokines				
TNF (pg/ml)	39(27-55)	29(17-39)***	29(17-42)	27(17-36)
IL-6 (pg/ml)	120(43-557)	30(13-87)***	32(13-98)	27(12-48)
IL-8 (pg/ml)	119(68-292)	77(38-165)**	84(41-147)	70(33-174)
IL-10 (pg/ml)	18(6-77)	7(2-20)**	7(2-34)	5(1-15)*
IL-1ra (pg/ml)	42(20-110)	16(8-43)***	24(10-57)	14(7-32)
Albumin oxidation fractions&				
HMA (%)	41(29-55)	46(34-58)	46(34-59)	46(34-56)
HNA1+HNA2 (%)	57(42-69)	52(41-65)	51(40-64)	52(42-65)
HNA2 (%)	10(7-17)	11(7-15)	11(7-17)	9(5-13)
Critical care (28-d)				
ICU	85(62.5)	122(45.0)***	55(55.6)	57(36.5)**
Mechanical ventilation	54(39.7)	60(22.1)***	35(35.4)	21(13.5)***
Renal replacement therapy	48(35.3)	58(21.4)**	26(26.3)	29(7-32)
NASCELD criteria for ACLF\$	58(42.7)	68(25.1)***	39(39.4)	24(15.4)***
Clinical course of ACLF				
No ACLF or ACLF-1 at final assessment	68(52.7)	157(63.0)	56(59.0)	95(68.8)
ACLF 2-3 at final assessment	61(47.3)	92(37.0)	39(41.1)	43(31.2)
28-day transplant free mortality				
	47(34.6)	78(28.8)	34(34.3)	37(23.7)
90-day transplant free mortality				
	69(50.7)	106(39.1)*	48(48.5)	50(32.1)**

Patients are divided in two groups: A: patients with and without proved bacterial infections at diagnosis of ACLF, B: patients with ACLF without proved bacterial infections at diagnosis who did and did not develop proved bacterial infections during follow-up.

Patients with ACLF and proved bacterial infection at diagnosis of the syndrome were excluded from this analysis

\$: two or more of the following vasopressors, renal replacement therapy, mechanical ventilation, grade 3-4 hepatic encephalopathy

&: According to the redox state at cysteine 34

*P-value<0.05; **P-value<0.01; ***P-value<0.001

Supplementary Table 4. Clinical and laboratory data at ACLF diagnosis, clinical course, and mortality of patients with AD who developed ACLF during follow-up that was triggered and not triggered by infection

	Bacterial infection at ACLF diagnosis (n=57)	No bacterial infection at ACLF diagnosis (n=58)
Clinical and analytical data		
Age (years)	54±13	58±11
Alcoholic cirrhosis (%)	28(50.0)	29(54.7)
No prior decompensation (%)	20(35.7)	12(22.6)
Ascites with surrogates (%)	54(94.7)	58(100.0)
Encephalopathy (%)	31(55.4)	27(46.6)
WBC (x10 ⁹ /L)	9.8(5.6-13.2)	6.5(4.5-11.4)
Serum CRP (mg/L)	34(19-56)	19(8-38)**
Serum bilirubin (mg/dL)	5.1(2.4-9.0)	5.7(2.8-13.3)
INR	1.9(1.5-2.7)	1.8(1.4-2.3)
Serum creatinine (mg/dL)	1.6(1.0-2.2)	1.7(0.8-2.1)
Plasma sodium (mEq/L)	133±8	135±7
Serum albumin	2.8(2.4-3.1)	3.0(2.2-3.5)
Renal failure (%)	23(40.4)	25(43.1)
Cerebral failure (%)	13(23.6)	7(12.1)
Respiratory failure (%)	11(22.5)	6(13.3)
Circulatory failure (%)	15(27.8)	10(17.2)
Coagulation failure (%)	18(32.7)	16(28.1)
Liver failure (%)	9(16.1)	18(31.6)
MELD score	25±7	25±7
CLIF-C ACLF score	49±8	47±9
NASCELD criteria for ACLF\$	3(5.3)	0(0.0)
ACLF-1(%)	31(54.4)	35(60.3)
ACLF-2(%)	19(33.3)	21(36.2)
ACLF-3(%)	7(12.3)	2(3.5)
Inflammatory cytokines		
TNF (pg/ml)	38(23-48)	29(16-38)
IL-6 (pg/ml)	840(30-1119)	22(12-48)
IL-8 (pg/ml)	146(93-659)	57(30-117)*
IL-10 (pg/ml)	18(6-151)	8(1-14)
IL-1ra (pg/ml)	21(5-64)	21(8-42)
Need for critical care (28-d)		
ICU	36(63.2)	24(41.4)*
Mechanical ventilation	25(43.9)	8(13.8)***
Renal replacement therapy	15(26.3)	9(15.5)
NASCELD criteria for ACLF\$	24(42.1)	9(15.5)**
Clinical course and mortality		
No ACLF or ACLF-1 at final assessment	29(55.8)	33(73.3)
ACLF 2-3 at final assessment	23(44.2)	12(26.7)
28-day transplant free mortality	19(33.3)	10(17.2)*
90-day transplant free mortality	31(54.4)	15(25.9)**

& According to the redox state at cysteine 34; \$: two or more of the following vasopressors, renal replacement therapy, mechanical ventilation, grade 3-4 hepatic encephalopathy

*P-value<0.05; **P-value<0.01; ***P-value<0.001