Supplementary Data

Hepatitis B virus-related acute-on-chronic liver failure (HBV-ACLF) exclusion criteria

The HBV-ACLF exclusion criteria were: (1) chronic liver disease of non-HBV etiology; (2) HBV-coinfected other etiologies, such as nonalcoholic steatohepatitis, hepatitis C virus, and alcohol (>3 drinks/day in men and >2 drinks/day in women, and persisting for >5 years);[1] (3) age <18 years; (4) pregnancy; (5) thyroid disease; (6) diabetes mellitus; (7) previous chronic kidney disease; (8) coronary heart disease treated with an anticoagulant; (9) hepatocellular carcinoma or other type of tumor; (10) liver transplantation; and (11) severe immunosuppression such as active tuberculosis, human immunodeficiency virus infection, or hematological disease.

Definition of organ failure

The chronic liver failure-sequential organ failure assessment (CLIF-SOFA) score was used to diagnose the organ failure for HBV-ACLF patients.[2] Briefly, liver failure was diagnosed when the TBil level was ≥12 mg/dL, and brain and kidney failure were considered when grade III–IV of hepatic encephalopathy (HE) occurred and serum creatinine level was ≥2 mg/dL, respectively. Circulation failure was confirmed when the mean arterial pressure was less than 70 mmHg or prescribed with vasoactive agents. Coagulation failure was determined if the PT-INR ≥2.5 or the platelet count was 20×10^9/L or lower. Whether the ratio of arterial oxygen partial pressure to fractional inspired oxygen (PaO_2/FiO_2) was 200 or less or the ratio of pulse oxymetric saturation to FiO_2 (SpO_2/FiO_2) was 214 or less was determined as respiratory failure.

Supplementary References

1. Singal AK, Bataller R, Ahn J, Kamath PS, Shah VH. ACG clinical guideline: alcoholic liver disease. Am J Gastroenterol 2018;113:175-194.
2. Moreau R, Jalan R, Gines P, Pavesi M, Angeli P, Cordoba J, et al. Acute-on-chronic liver failure is a distinct syndrome that develops in patients with acute decompensation of cirrhosis. Gastroenterology 2013;144:1426-1437, 1437.e1-e9.