Curative effect of combined lamivudine, adefovir dipivoxil, and stem cell transplantation on decompensated hepatitis B cirrhosis

L. Liu*, Y. Yan*, J. Zhou¹, L.W. Huang¹, C.P. He¹, K. Ling¹, H.C. Zhou¹, Q.M. Wen¹ and X.M. Wang¹

¹Department of Infectious Disease, Tianyou Hospital, Wuhan University of Science and Technology, Wuhan, China
²Tongji Medical College of Huazhong University of Science and Technology School of Medicine and Health Management, Wuhan, China

*These authors contributed equally to this study.
Corresponding author: J. Zhou
E-mail: llzjchina@126.com

Received June 18, 2013
Accepted December 6, 2013
Published February 21, 2014
DOI http://dx.doi.org/10.4238/2014.February.21.13

ABSTRACT. This study assessed the clinical efficacy of lamivudine and adefovir dipivoxil combined with autologous bone marrow stem cell transplantation as treatment for patients with hepatitis B and decompensated liver cirrhosis. In total, 77 patients with hepatitis B and decompensated liver cirrhosis were randomly divided into two groups. Under general symptomatic and supportive treatment, the patients in group A (37 cases) were treated with lamivudine and adefovir dipivoxil, whereas those in group B (40 cases) were treated with autologous bone marrow stem cell transplantation in combination with lamivudine and adefovir dipivoxil. After 4 weeks of treatment, the liver function indicators and clinical signs and symptoms of the patients in group B improved more significantly than those of patients in group A. Lamivudine and adefovir dipivoxil in combination with autologous
bone marrow stem cell transplantation effectively prevented hepatitis B virus infection and bone marrow stem cell damage. This combination treatment facilitates the differentiation of bone marrow stem cells into normal liver cells to restore liver structure and improve liver function, thereby improving the quality of life of patients.

Key words: Lamivudine; Adefovir dipivoxil; Hepatitis B; Autologous bone marrow stem cell; Decompensated liver cirrhosis