WHAT IS CLAIMED IS:

1. A method for establishing a hepatic precursor cell line, comprising following steps:

S0: preparing hepatic precursor cells, miscible liquids, and a reprogramming culture medium, wherein the miscible liquids comprises a serum-free medium, polyethyleneimine, and a CLP plasmid;

S1: transfecting the hepatic precursor cells with the miscible liquids to obtain transduced hepatic precursor cells; and

S2: passing the transduced hepatic precursor cells into the reprogramming culture medium for subculture to obtain immortalized hepatic precursor cells.

2. The method for establishing the hepatic precursor cell line according to claim 1, wherein the volume ratio of the serum-free medium to the polyethyleneimine is (500-1000):1.

3. The method for establishing the hepatic precursor cell line according to claim 1, wherein the final concentration of the CLP plasmid is (1-5) μg/μL.

4. The method for establishing the hepatic precursor cell line according to claim 1, wherein the step of providing hepatic precursor cells comprises: culturing hepatocytes in the reprogramming culture medium for expansion, and then replacing the reprogramming culture medium with a serum-reduced medium to continue the culture and obtain hepatic precursor cells.

5. The method for establishing the hepatic precursor cell line according to claim 1, wherein the reprogramming culture medium comprises a DMEM/F12 basal medium and, in terms of the content relative to the DMEM/F12 basal medium: 15-25 μg/μL of hepatocyte growth factor (HGF), 15-25 μg/μL of epidermal growth factor (EGF), 5-15 μM of rock kinase inhibitor Y27632,1-5 μM of Wnt signaling pathway agonist CHIR99021,1-5 μM of TGF-β signaling inhibitor A8301,1-5 μM of sphingosine-1-phosphate (S1P), and 5 μM of indole-3-acetic acid (LPA).

6. The method for establishing the hepatic precursor cell line according to claim 5, wherein the reprogramming culture medium further comprises N2 nutritional supplement,

B27 nutritional supplement, sodium pyruvate, and ascorbic acid.

7. The method for establishing the hepatic precursor cell line according to claim 1, wherein the reprogramming culture medium comprises a DMEM/F12 basal medium and, in terms of the content relative to the DMEM/F12 basal medium: 1-10% N2 nutrient supplement, 1-10% B27 nutrient supplement, 1 mM sodium pyruvate, 5-15 μg/ml ascorbic acid, 15-25 μg/μL hepatocyte growth factor (HGF), 15-25 μg/μL epidermal growth factor (EGF), 5-15 μM ROCK kinase inhibitor Y27632,1-5 μM WNT signaling agonist CHIR99021,1-5 μM TGF-β signaling inhibitor A8301,1-5 μM S1P (sphingosine-1-phosphate), and 5 μM indole-3-acetic acid (LPA).

8. A hepatic precursor cell prepared by the method for establishing the hepatic precursor cell line as claimed in claim 1.

9. The hepatic precursor cell according to claim 8, wherein the hepatic precursor cell negatively expresses CD34, CD45, and HLA-DRPQ, and positively expresses CD24 and CD326.

10. An application of the hepatic precursor cell as claimed in claim 8, which is used in the preparation of a drug for the treatment of acute liver failure.