WHAT IS CLAIMED IS:

1. Use of a liver stem cell comprising the following characteristics in the manufacture of a medicament for treating a liver disease in a subject:

(i) expresses the protein markers SOX9, HNF4α, HNF3β, FOXA3, FOXQ1 and EPCAM;

(ii) expresses levels of KRT19 protein at least 2-fold greater but not more than 5-fold greater than background expression of KRT19 protein or expression of KRT19 protein by a negative control, wherein the background expression of KRT19 protein is at least 2-fold and not more than 5-fold greater than the background signal of KRT19 protein when omitting the primary detection antibody, or is at least 2-fold and not more than 5-fold greater than the fluorescence signal of a control cell that does not express KRT19 protein, and the negative control is a HepG2 cell line or an embryonic stem cell H1 line (ESC(H1));

(iii) does not express detectable protein levels of KRT7 and AFP; and

(iv) does not have a polarized cell phenotype,

wherein the liver stem cell is to be transplanted into the liver of the subject, and wherein the transplanted cell is to repopulate the liver of the subject to treat the liver disease.

2. The use of claim 1, wherein the liver disease is selected from the group of metabolic disease, autoimmune disease, infectious disease, drug induced acute and chronic liver failure, and liver cancer.

3. The use of claim 1, wherein the liver stem further expresses 1, 2, or 3 protein markers selected from CD24, PROM1, and ECAD.

4. The use of claim 1, wherein the characteristics of the stem cell are maintained in long-term culture, and comprise a normal karyotype after 19 passages in culture.

5. The use of claim 1, wherein the liver stem cell is a mammalian liver stem cell.

6. The use of claim 1, wherein the liver stem cell is a human liver stem cell.

7. The use of claim 1, wherein the liver stem cell is a mouse liver stem cell.

8. The use of claim 1, wherein the liver stem cell is a fetal liver stem cell.

9. The use of claim 1, wherein the liver stem cell is isolated from a healthy subject.

10. The use of claim 1, wherein the liver stem cell is isolated from a subject with liver disease, wherein the liver disease is selected from the group of metabolic disease, autoimmune disease, infectious disease, or drug induced acute and chronic liver failure.