CLAIMS

1. An adult liver progenitor cell characterized in that said cell is measured:
   (a) positive for α-smooth muscle actin (ASMA), albumin (ALB), and CD140b;
   (b) negative for Sushi domain containing protein 2 (SUSD2) and Cytokeratin-19 (CK-19).
2. The cell of Claim 1 wherein said cell is further measured positive for
   (a) At least one hepatic marker selected from albumin, HNF-3B, HNF-4, CYP1A2, CYP2C9, CYP2E1 and CYP3A4;
   (b) At least one mesenchymal marker selected from Vimentin, CD90, CD73, CD44, and CD29;
   (c) At least one liver-specific activity selected from urea secretion, bilirubin conjugation, alpha-1-antitrypsin secretion, and CYP3A4 activity;
   (d) At least one marker selected from ATP2B4, ITGA3, TFRC, SLC3A2, CD59, ITGB5, CD151, ICAM1, ANPEP, CD46, and CD81; and
   (e) At least one marker selected from MMP1, ITGA11, FMOD, KCND2, CCL11, ASPN, KCNK2, and HMCN1.
3. The cell of Claims 1 or 2 characterized in that the cell is measured negative for:
   (a) CD271;
   (b) At least one marker selected from ITGAM, ITGAX, IL1R2, CDH5, and NCAM1; and
   (c) At least one marker selected from HP, CP, RBP4, APOB, LBP, ORM1, CD24, CPM, and APOC1.
4. The cell of any one of the preceding Claims wherein said cell is further measured positive for at least one liver-specific activity selected from sulfotransferase activity, tryptophan-2,3-dioxygenase activity, liver carboxylase activity, ammonia metabolism, and glycogen storage.
5. The isolated cell population comprising at least 60% or between 60% and 99% or between 70% and 90% of cells of any one of the preceding Claims.
6. The cell population of Claim 5 wherein said cell population is differentiated into cells presenting liver-specific activities.
7. The cell or population of any one of the preceding Claims wherein said cell or population is modified by means of one or more chemical agents, cell culture medium, growth factors, and/or nucleic acid vectors.
8. A biological material isolated from the cell or population of any one of the Claims from 1 to 7, wherein the biological material is a conditioned cell culture media, a protein extract, or a membrane vesicle.
9. A composition comprising the cell or population according to any one of the Claims 1 to 7, or comprising the biological material of claim 8.
10. The cell or population of any one of Claims 1 to 7, a biological material of Claim 8, or the composition of Claim 9 for use in treating a liver disease.

11. The use of Claim 10 wherein the liver disease is an inborn error of liver metabolism, an inherited Blood Coagulation Disorder, progressive familial intrahepatic cholestasis type 1 / 2 / 3, alpha 1-Antitrypsin Deficiency, defect of liver cell transporters, Porphyria, fatty liver or other fibrotic liver disease, primary biliary cirrhosis, sclerosing cholangitis, liver degenerative disease, or acute or chronic liver failure.
12. A pharmaceutical composition comprising a therapeutically effective amount of the cell or population according to any one of the Claims 1 to 7 for use in treating a condition that may benefit from their engraftment in a human tissue.
13. A pharmaceutical composition of Claim 12 wherein said composition suspension of isolated cells that is suitable for intrahepatic, intrasplenic, or intraveneous administration.
14. A kit comprising a cell, cell population of any one of Claims 1 to 7, a composition of Claim 9, or a biological material of Claim 8.
15. The kit of claim 14 wherein said kit further comprises one or more vials containing said cell population, said composition, or said biological material and one or more of the following elements: devices, disposable materials, solutions, chemical products, biological products, and/or instructions for using elements of said kit.