

CLAIMS

1. A population of cells, in particular an isolated population of cells, comprising at least 5% of hepatic stem-like cells expressing the alpha-fœtoprotein marker (AFP+) and not expressing the albumin marker (ALB-), or an extract thereof.
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2. The population of cells according to claim 1, wherein the hepatic stem-like cells are further expressing the T-Box Transcription Factor 3 marker (TBX3+) and/or the Hepatocyte Nuclear Factor 4 Alpha marker (HNF4A+), preferably the T-Box Transcription Factor 3 marker (TBX3+) and the Hepatocyte Nuclear Factor 4 Alpha marker (HNF4A+).
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3. The population of cells according to claim 1 or 2, wherein the hepatic stem-like cells are cryopreserved.
4. A particle, in particular a spheroid, comprising a population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3.
- 15 5. A suspension comprising a population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3.
6. A pharmaceutical composition comprising (i) a population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, and/or at least one particle according to claim 4, and/or a suspension according to claim 5, and (ii) a pharmaceutically acceptable vehicle.
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7. A medical device comprising a population of cells comprising hepatic stem-like cells, or an extract thereof according to any one of claims 1 to 3, and/or at least one particle according to claim 4 and/or a suspension according to claim 5, and/or a pharmaceutical composition according to claim 6.
- 25 8. A non-human animal model comprising a heterologous population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3.

9. The hepatic stem-like cells, or an extract thereof, as defined in any one of claims 1 to 3, or the population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, or the particle according to claim 4, or the suspension according to claim 5, or the pharmaceutical composition according to claim 6, for use as a medicament.
10. The hepatic stem-like cells, or an extract thereof, as defined in any one of claims 1 to 3, or the population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, or the particle according to claim 4, or the suspension according to claim 5, or the pharmaceutical composition according to claim 6, or the medical device according to claim 7, for use in preventing and/or treating a fulminant liver disorder.
11. The hepatic stem-like cells, or an extract thereof, as defined in any one of claims 1 to 3, or the population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, or the particle according to claim 4, or the suspension according to claim 5, or the pharmaceutical composition according to claim 6, or the medical device according to claim 7, for use according to claim 10, wherein the fulminant liver disorder is an acute liver failure (ALF) or an acute chronic liver failure (ACLF).
12. The hepatic stem-like cells, or an extract thereof, as defined in any one of claims 1 to 3, or the population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, or the particle according to claim 4, or the suspension according to claim 5, or the pharmaceutical composition according to claim 6, or the medical device according to claim 7, for use according to claim 11, and wherein the ACLF is associated with a liver disease selected in the group consisting of the non-alcoholic steatohepatitis (NASH); alcoholic hepatitis; viral-induced hepatitis; a cryptogenic liver disease; a malignant liver disease, such as hepatocellular carcinoma and cholangiocarcinoma; autoimmune hepatitis, a vascular liver disease, such as Budd-Chiari syndrome; a cholestatic liver disease; and an inherited metabolic liver disease, such as, Wilson's disease and an urea cycle disorder.

13. Use of a cryopreserved population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, for preparing a particle, as defined in claim 4.
14. An *in vitro* method for screening a drug, said method comprising the steps of:
- 5 a) providing at least one hepatic stem-like cell, or an extract thereof, as defined in any one of claims 1 to 3, and/or the population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, and/or particle according to claim 4, and/or suspension according to claim 5;
- 10 b) contacting said at least one cell or an extract thereof, and/or said population of cells or extract thereof, and/or said particle, and/or said suspension, from step a), with a drug candidate;
- c) measuring one or more biological parameter(s) and optionally comparing said one or more biological parameter(s) with one or more reference parameter(s);
- 15 d) determining whether the drug candidate is of therapeutic and/or diagnostic interest.
15. A kit for treating and/or preventing a fulminant liver disorder, said kit comprising:
- 20 a) hepatic stem-like cells, or an extract thereof, as defined in any one of claims 1 to 3, or a population of cells comprising hepatic stem-like cells, or an extract thereof, according to any one of claims 1 to 3, or particle according to claim 4, or suspension according to claim 5, or pharmaceutical composition according to claim 7; and
- 25 b) a mean to administer said cells or extract thereof, population or extract thereof, or particle, or suspension or pharmaceutical composition.