14. The liver organoid of claim 12, wherein the spatially organized structure comprises a core of hepatocytes and peripheral bile duct-like structures formed by cholangiocytes around the core of hepatocytes.

15. The liver organoid of claim 12, wherein the spatially organized structure comprises endogenous extracellular matrix adhesion molecules.

16. The liver organoid of claim 12, wherein the spatially organized structure comprises liver parenchymal cells in both the interior and exterior of the organoid.

17. The liver organoid of claim 14, wherein the hepatocytes are connected by a network of bile canaliculi to the cholangiocyte bile duct-like structures.