**Table S1. HCC cell lines with different metastatic potentials**

|  |  |  |
| --- | --- | --- |
| Cell line | chracteristics | Metastatic potential |
| MHCC97LMHCC97HCSQT-1CSQT-2HCCLM3HCCLM1-S3HCCLM1-S4HCCLM1-S5HCCLM1-S11HCCLnM1-S11HCCLnM1-S13Huh7Hep3BSMMC-7721Bel-7402PLC/5HepG2SNU-398 | HCC clone cells with 40% upon orthotopic inoculation in nude miceHCC clone cells with 100% lung metastasis in nude miceCell line derived from portal vein tumor thrombus of HCC patients Subclonal cell line of CSQT-1 with 100% portal vein tumor thrombus in nude miceSubclonal cell line of MHCC97H with 100% tumorigenicity, 100% abdominal wall metastases, 100% intrahepatic and pulmonary metastases in nude mice.Subclonal cell line of HCCLM3 with 100% pulmonary metastases in nude miceSubclonal cell line of HCCLM3 with 100% pulmonary metastases in nude miceSubclonal cell line of HCCLM3 with 100% pulmonary metastases in nude mice Subclonal cell line of HCCLM3 with 75% pulmonary metastases in nude mice.Subclonal cell line of HCCLM3 with 100% pulmonary and lymphatic metastasis in nude mice Subclonal cell line of HCCLM3 with 25% pulmonary and lymphatic metastasis in nude mice Human well differentiated hepatocyte derived cellular cancerHuman HCCHuman HCC with hepatitis, liver cirrhosisHuman HCC with nodular cirrhosisHuman HCCHuman HCCHuman HCC | HighHighHighHighHighHighHighHighHighHighHighLowLowLowLowLowLowLow |

HCC: Hepatocellular carcinoma