Table S1 Searches for databases

|  |  |
| --- | --- |
| Databases | Searches |
| Cochrane Library / Pubmed | (("Carcinoma, Hepatocellular"[Mesh] OR "Carcinomas, Hepatocellular" OR "Hepatocellular Carcinomas" OR "Liver Cell Carcinoma, Adult" OR "Liver Cancer, Adult" OR "Adult Liver Cancer" OR "Adult Liver Cancers" OR "Cancer, Adult Liver" OR "Cancers, Adult Liver" OR "Liver Cancers, Adult" OR "Liver Cell Carcinoma" OR "Carcinoma, Liver Cell" OR "Carcinomas, Liver Cell" OR "Cell Carcinoma, Liver" OR "Cell Carcinomas, Liver" OR "Liver Cell Carcinomas" OR "Hepatocellular Carcinoma" OR "Hepatoma" OR "Hepatomas") OR ("HCC")) AND ((("Liver Transplantation"[Mesh] OR "Transplantation, Liver" OR "Liver Transplantations" OR "Transplantations, Liver" OR "Transplantation, Hepatic" OR "Grafting, Liver" OR "Graftings, Liver" OR "Liver Grafting" OR "Liver Graftings" OR "Hepatic Transplantation" OR "Hepatic Transplantations" OR "Transplantations, Hepatic") AND (("Living Don OR s"[Mesh] OR "Don OR s, Living" OR "Don OR , Living" OR "Living Don OR ") OR ("living related" OR "living-related") OR ("living-don OR ") OR ("living donation" OR "living-donation" OR "living liver donation" OR "living liver-donation"))) OR ("LDLT")) AND (("Disease-Free Survival"[Mesh] OR "Disease Free Survival" OR "Event-Free Survival" OR "Event Free Survival" OR "Event-Free Survivals" OR "Survival, Event-Free" OR "Survivals, Event-Free" OR "Survival, Disease-Free" OR "Disease-Free Survivals" OR "Survival, Disease Free" OR "Survivals, Disease-Free" OR "Progression-Free Survival" OR "Progression Free Survival" OR "Progression-Free Survivals" OR "Survival, Progression-Free" OR "Survivals, Progression-Free") OR ("DFS" OR "RFS" OR "TFS" ) OR ("free survival" OR "free-survival") OR ("recurrence rate" OR "rate of recurrence") OR ("time to recurrence")) |
| Embase | (('liver cell carcinoma'/exp) OR ('hepatocellular carcinomas':ab,ti) OR ('carcinoma, hepatocellular':ab,ti) OR ('liver cell carcinoma, adult':ab,ti) OR ('liver cancer, adult':ab,ti) OR ('adult liver cancer':ab,ti) OR ('adult liver cancers':ab,ti) OR ('liver cell carcinoma':ab,ti) OR ('liver cell carcinomas':ab,ti) OR ('hepatocellular carcinoma':ab,ti) OR ('hepatoma':ab,ti) OR ('hepatomas':ab,ti) OR ('hcc':ab,ti)) AND (((('liver transplantation'/exp) OR ('liver transplantations':ab,ti) OR ('grafting, liver':ab,ti) OR ('liver grafting':ab,ti) OR ('liver graftings':ab,ti) OR ('hepatic transplantation':ab,ti) OR ('hepatic transplantations':ab,ti)) AND (('living donor'/exp) OR ('living donors':ab,ti) OR ('living related':ab,ti) OR ('living-related':ab,ti) OR ('living-don':ab,ti) OR ('living donation':ab,ti) OR ('living-donation':ab,ti) OR ('living liver donation':ab,ti) OR ('living liver-donation':ab,ti))) OR ('ldlt':ab,ti)) AND (('disease free survival'/exp) OR ('disease-free survival':ab,ti) OR ('event-free survival':ab,ti) OR ('event free survival':ab,ti) OR ('event-free survivals':ab,ti) OR ('disease-free survivals':ab,ti) OR ('progression-free survival':ab,ti) OR ('progression free survival':ab,ti) OR ('progression-free survivals':ab,ti) OR ('dfs':ab,ti) OR ('rfs':ab,ti) OR ('tfs':ab,ti) OR ('free survival':ab,ti) OR ('free-survival':ab,ti) OR ('recurrence rate':ab,ti) OR ('rate of recurrence':ab,ti) OR ('time to recurrence':ab,ti)) |

Table S2 NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE FOR COHORT STUDIES

|  |  |  |
| --- | --- | --- |
| **Category** | **Item** | **Score** |
| **Selection** | **1) Representativeness of the exposed cohort** |
| a) truly representative of the average HCC recurrence (describe) in the community or b) somewhat representative of the average HCC recurrence\_ in the community  | 1 |
| c) selected group of users e.g. nurses, volunteers (0) | 0 |
| d) no description of the derivation of the cohort (0) | 0 |
| **2) Selection of the non exposed cohort** |
| a) drawn from the same community as the exposed cohort (1) | 1 |
| b) drawn from a different source (0) | 0 |
| c) no description of the derivation of the non exposed cohort (0) | 0 |
| **3) Ascertainment of exposure** |
| a) secure record (e.g. surgical records)or b) structured interview | 1 |
| c) written self report (0) | 0 |
| d) no description (0) | 0 |
| **4) Demonstration that outcome of interest was not present at start of study** |
| a) yes (1) | 1 |
| b) no (0) | 0 |
| **Comparability** | **1) Comparability of cohorts on the basis of the design or analysis** |
| a) study controls for HCC staging\_ (select the most important factor) | 1 |
| b)study controls for any additional factor (1) (This criteria could be modified to indicate specific control for a second important factor.) | 1 |
| **Outcome** | **1) Assessment of outcome**  |
| a) independent blind assessmentor b) record linkage | 1 |
| c) self report | 0 |
| d) no description | 0 |
| **2) Was follow-up long enough for outcomes to occur** |
| a) yes (select an adequate follow up period for outcome of interest) | 1 |
| b) no  | 0 |
| **3) Adequacy of follow up of cohorts** |
| a) complete follow up - all subjects accounted foror b) subjects lost to follow up unlikely to introduce bias - small number lost 50 % (select an adequate %) follow up, or description provided of those lost | 1 |
| c) follow up rate < 60 % (select an adequate %) and no description of those lost | 0 |
| d) no statement | 0 |

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability



Figure S1 Hazard Ratios for HCC recurrence grouped by countries/regions



Figure S2 Hazard Ratios for HCC recurrence after excluding one study with the most significant impact



Figure S3 Hazard Ratios for HCC recurrence after including a study for disease-free Survival