S2 Table. **Univariate analysis of Disease free survival**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | n | death(%) | 1 year survival(%) | 2 year survival(%) | 3 year survival(%) | Chisq-value | P-value |
| Age(year) |  |  |  |  |  | 3.574 | 0.059 |
| ≤60 | 981 | 69.0 | 44.7 | 34.4 | 31.2 |  |  |
| ＞60 | 340 | 57.6 | 56.2 | 41.7 | 28.4 |  |  |
| Sex |  |  |  |  |  | 3.769 | 0.052 |
| Female | 163 | 58.3 | 55.1 | 46.6 | 36.6 |  |  |
| Male | 1158 | 67.2 | 46.5 | 34.9 | 30.3 |  |  |
| Cirrhosis |  |  |  |  |  | 0.245 | 0.620 |
| Yes | 227 | 56.0 | 45.8 | 31.8 | 27.9 |  |  |
| No | 1097 | 65.6 | 47.9 | 37.4 | 32.0 |  |  |
| Child\_Pugh |  |  |  |  |  | 0.725 | 0.394 |
| A | 61 | 62.3 | 59.2 | 45.6 | 31.8 |  |  |
| B | 1260 | 66.3 | 47.0 | 35.9 | 31.3 |  |  |
| Tumour\_diameter (cm) | |  |  |  |  | 13.616 | <0.001 |
| ≤10 | 406 | 59.9 | 55.9 | 44.4 | 39.5 |  |  |
| ＞10 | 915 | 68.9 | 43.7 | 32.7 | 27.6 |  |  |
| BCLC |  |  |  |  |  | 123.941 | <0.001 |
| A | 360 | 75.4 | 71.3 | 56.9 | 48.2 |  |  |
| B | 647 | 57.4 | 43.8 | 33.6 | 29.7 |  |  |
| C | 314 | 64.1 | 27.6 | 17.6 | 14.6 |  |  |
| Tumour\_capsule |  |  |  |  |  | 54.596 | <0.001 |
| Complete | 553 | 75.4 | 36.8 | 25.6 | 22.9 |  |  |
| Imcompelte | 537 | 57.4 | 58.9 | 48.9 | 41.0 |  |  |
| Absence | 231 | 64.1 | 46.5 | 32.3 | 28.0 |  |  |
| Macrovascular |  |  |  |  |  | 115.862 | <0.001 |
| No | 914 | 59.5 | 55.2 | 45.0 | 39.5 |  |  |
| Yes | 407 | 80.8 | 30.4 | 15.7 | 11.4 |  |  |
| Leukocyte (×109/L) | |  |  |  |  | 2.270 | 0.132 |
| ≤4.48 | 151 | 66.9 | 56.2 | 41.2 | 32.9 |  |  |
| ＞4.48 | 1170 | 66.0 | 46.4 | 35.7 | 31.1 |  |  |
| RBC (×1012/L) | |  |  |  |  | 1.707 | 0.191 |
| ≤3.55 | 166 | 56.6 | 59.0 | 41.1 | 28.8 |  |  |
| ＞3.55 | 1155 | 67.4 | 45.9 | 35.4 | 31.1 |  |  |
| Lymphocyte (×109/L) | |  |  |  |  | 1.630 | 0.202 |
| ≤2.08 | 985 | 65.5 | 46.2 | 34.8 | 30.2 |  |  |
| ＞2.08 | 336 | 67.9 | 51.6 | 40.8 | 34.4 |  |  |
| Neutrophil (×109/L) | |  |  |  |  | 15.237 | <0.001 |
| ≤7.25 | 1140 | 69.4 | 45.5 | 33.9 | 29.2 |  |  |
| ＞7.25 | 181 | 45.3 | 60.9 | 52.9 | 44.8 |  |  |
| Platelet (×103/uL) | |  |  |  |  | 2.642 | 0.104 |
| ≤204 | 776 | 66.8 | 54.0 | 36.8 | 31.1 |  |  |
| ＞204 | 545 | 65.1 | 42.6 | 36.0 | 32.0 |  |  |
| NLR |  |  |  |  |  | 1.264 | 0.261 |
| ≤1.45 | 210 | 71.4 | 51.7 | 39.7 | 31.6 |  |  |
| ＞1.45 | 1111 | 65.1 | 46.8 | 35.7 | 31.3 |  |  |
| SII |  |  |  |  |  | 1.659 | 0.198 |
| ≤390.82 | 537 | 69.8 | 52.6 | 37.8 | 30.7 |  |  |
| ＞390.82 | 784 | 63.5 | 44.2 | 35.6 | 32.4 |  |  |
| PLR |  |  |  |  |  | 6.084 | 0.014 |
| ≤91.36 | 457 | 67.2 | 53.6 | 40.4 | 33.6 |  |  |
| ＞91.36 | 864 | 65.5 | 44.4 | 34.4 | 30.4 |  |  |
| APRI |  |  |  |  |  | 3.587 | 0.058 |
| ≤0.19 | 186 | 58.0 | 52.1 | 39.3 | 36.6 |  |  |
| ＞0.19 | 1135 | 68.0 | 46.4 | 36.7 | 30.2 |  |  |
| ANRI |  |  |  |  |  | 31.910 | <0.001 |
| ≤10.08 | 616 | 84.4 | 29.6 | 19.0 | 16.7 |  |  |
| ＞10.08 | 705 | 63.1 | 50.6 | 39.4 | 33.8 |  |  |
| ALRI |  |  |  |  |  | 20.735 | <0.001 |
| ≤22.91 | 40.7 | 62.3 | 54.6 | 43.6 | 39.1 |  |  |
| ＞22.91 | 59.3 | 68.7 | 42.6 | 31.2 | 25.7 |  |  |
| PNI |  |  |  |  |  | 4.522 | 0.033 |
| ≤49.55 | 714 | 68.8 | 46.5 | 34.0 | 27.9 |  |  |
| ＞49.55 | 607 | 62.9 | 48.8 | 39.1 | 35.7 |  |  |
| PT (s) |  |  |  |  |  | 7.323 | 0.007 |
| ≤11.7 | 253 | 59.7 | 52.8 | 46.9 | 42.0 |  |  |
| ＞11.7 | 1068 | 67.6 | 46.3 | 33.7 | 28.6 |  |  |
| Albumin(g/dL) |  |  |  |  |  | 6.836 | 0.009 |
| ≤42.8 | 941 | 69.1 | 45.7 | 34.3 | 28.5 |  |  |
| ＞42.8 | 380 | 58.7 | 52.0 | 41.4 | 39.2 |  |  |
| AST(U/L) |  |  |  |  |  | 31.569 | <0.001 |
| ≤53 | 871 | 62.8 | 52.2 | 41.0 | 36.3 |  |  |
| ＞53 | 450 | 72.4 | 38.3 | 27.1 | 21.2 |  |  |
| ALT(U/L) |  |  |  |  |  | 3.659 | 0.056 |
| ≤34 | 543 | 61.0 | 49.6 | 37.9 | 35.3 |  |  |
| ＞34 | 778 | 69.7 | 46.1 | 35.2 | 28.8 |  |  |
| DBIL(μmol/L) |  |  |  |  |  | 0.278 | 0.598 |
| ≤7 | 1108 | 66.1 | 47.4 | 36.5 | 31.6 |  |  |
| ＞7 | 213 | 66.2 | 48.1 | 35.3 | 29.5 |  |  |
| TBIL (umol/L) |  |  |  |  |  | 5.343 | 0.021 |
| ≤10.1 | 478 | 66.7 | 42.9 | 30.0 | 25.5 |  |  |
| ＞10.1 | 843 | 65.7 | 50.1 | 39.6 | 34.2 |  |  |
| AFP (ng/mL) |  |  |  |  |  | 33.170 | <0.001 |
| ≤400 | 810 | 62.6 | 53.8 | 42.4 | 35.5 |  |  |
| ＞400 | 511 | 71.6 | 37.6 | 26.5 | 24.5 |  |  |

BCLC, Barcelona Clinic Liver Cancer; RBC, red blood corpuscle; AST, aspartate amino transferase; ALT, alanine transaminase; NLR, neutrophil to lymphocyte ratio; SII, systemic immune-inflammation index; PLR, platelet to lymphocyte ratio; APRI, AST to platelet ratio index; ANRI, AST to neutrophil ratio index; ALRI, AST to lymphocyte ratio index; PNI, prognostic nutritional index; PT, prothrombin time; DBIL, direct bilirubin; TBIL, total bilirubin; AFP, α-fetoprotein.