**Supplementary Table 1. Hazard Ratios Stratified by Baseline Subject and Tumor Characteristics**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Leptin (ng/mL)** | | | **Adiponectin (ng/mL)** | | | **HOMA-IR** | | |
| **Variable** | | **≥7.9 vs. <7.9** | ***P-*value** | ***P* for Interaction** | **≥13050 vs. <13050** | ***P-*value** | ***P* for Interaction** | **≥3.2 vs. <3.2** | ***P-*value** | ***P* for Interaction** |
| **Age** |  |  |  | 0.50 |  |  | 0.52 |  |  | 0.14 |
|  | **≥ 62.0** | 0.51 (0.23-1.15) | 0.10 |  | 2.24 (0.93-5.37) | 0.07 |  | 0.47 (0.20-1.12) | 0.09 |  |
|  | **< 62.0** | 0.74 (0.34-1.59) | 0.44 |  | 1.61 (0.76-3.49) | 0.20 |  | 1.16 (0.54-2.49) | 0.70 |  |
| **Gender** | |  |  | 0.56 |  |  | 0.57 |  |  | 0.72 |
|  | **Male** | 0.66 (0.35-1.25) | 0.20 |  | 2.08 (1.11-3.90) | **0.02** |  | 0.72 (0.38-1.34) | 0.30 |  |
|  | **Female** | 0.45 (0.14-1.43) | 0.18 |  | 1.35 (0.36-5.01) | 0.65 |  | 0.95 (0.27-3.26) | 0.93 |  |
| **Hepatitis B virus** | |  |  | 0.13 |  |  | 0.96 |  |  | 0.26 |
|  | **Positive** | 2.06 (0.40-10.47) | 0.38 |  | 1.90 (0.34-10.57) | 0.45 |  | 1.82 (0.35-9.39) | 0.47 |  |
|  | **Negative** | 0.51 (0.28-0.92) | **0.02** |  | 1.72 (0.94-3.13) | 0.07 |  | 0.66 (0.36-1.19) | 0.17 |  |
| **Hepatitis C virus** | |  |  | 0.20 |  |  | 0.65 |  |  | 0.43 |
|  | **Positive** | 0.44 (0.20-0.93) | **0.03** |  | 1.69 (0.79-3.57) | 0.17 |  | 0.65 (0.31-1.35) | 0.25 |  |
|  | **Negative** | 0.93 (0.38-2.30) | 0.88 |  | 2.05 (0.84-4.99) | 0.11 |  | 0.95 (0.39-2.32) | 0.92 |  |
| **Diabetes mellitus** | |  |  | 0.65 |  |  | 0.85 |  |  | 0.17 |
|  | **Positive** | 0.32 (0.13-0.80) | **0.02** |  | 2.12 (0.89-5.06) | 0.09 |  | 0.28 (0.11-0.69) | **0.006** |  |
|  | **Negative** | 0.55 (0.25-1.22) | 0.14 |  | 1.96 (0.91-4.19) | 0.08 |  | 0.80 (0.37-1.73) | 0.57 |  |
| **Alcohol history** | |  |  | 0.49 |  |  | 0.19 |  |  | 0.47 |
|  | **Positive** | 0.40 (0.07-2.09) | 0.27 |  | 6.58 (0.79-54.78) | 0.08 |  | 0.48 (0.10-2.15) | 0.33 |  |
|  | **Negative** | 0.66 (0.36-1.19) | 0.66 |  | 1.59 (0.88-2.88) | 0.11 |  | 0.90 (0.49-1.64) | 0.74 |  |
| **BMI at enrollment (Kg/m2)** | |  |  | 0.01 |  |  | 0.24 |  |  | 0.03 |
|  | **< 25** | 0.14 (0.02-1.12) | 0.06 |  | 2.68 (0.99-7.23) | 0.05 |  | 0.27 (0.06-1.18) | 0.08 |  |
|  | **25-30** | 1.32 (0.55-3.14) | 0.52 |  | 1.68 (0.69-4.05) | 0.24 |  | 1.22 (0.50-2.96) | 0.65 |  |
|  | **≥ 30** | 0.22 (0.06-0.81) | **0.02** |  | 1.28 (0.42-3.87) | 0.66 |  | 1.25 (0.33-4.66) | 0.73 |  |
| **Child-Pugh class** | |  |  | 0.01 |  |  | 0.95 |  |  | 0.85 |
|  | **A** | 0.92 (0.43-1.94) | 0.83 |  | 1.52 (0.72-3.22) | 0.27 |  | 0.77 (0.36-1.66) | 0.51 |  |
|  | **B** | 0.26 (0.10-0.61) | **<0.01** |  | 1.39 (0.51-3.77) | 0.51 |  | 0.67 (0.29-1.53) | 0.67 |  |
| **Within Milan criteria** | |  |  | 0.29 |  |  | 0.70 |  |  | 0.86 |
|  | **Positive** | 1.52 (0.29-7.89) | 0.61 |  | 2.66 (0.51-13.79) | 0.24 |  | 0.81 (0.18-3.67) | 0.79 |  |
|  | **Negative** | 0.66 (0.36-1.20) | 0.17 |  | 1.94 (1.07-3.52) | **0.02** |  | 0.71 (0.39-1.30) | 0.27 |  |
| **BCLC stage** | |  |  | 0.54 |  |  | 0.91 |  |  | 0.62 |
|  | **0,A** | 0.56 (0.18-1.76) | 0.32 |  | 1.81 (0.57-5.74) | 0.31 |  | 0.73 (0.23-2.27) | 0.58 |  |
|  | **B,C** | 0.81 (0.43-1.54) | 0.53 |  | 1.74 (0.92-3.28) | 0.08 |  | 0.97 (0.51-1.85) | 0.94 |  |
| **AFP** | |  |  | 0.40 |  |  | 0.79 |  |  | 0.40 |
|  | **≥ 47.9 ng/mL** | 0.84 (0.41-1.71) | 0.64 |  | 1.72 (0.84-3.50) | 0.13 |  | 1.08 (0.53-2.19) | 0.82 |  |
|  | **< 47.9 ng/mL** | 0.53 (0.22-1.29) | 0.16 |  | 1.90 (0.77-4.66) | 0.16 |  | 0.66 (0.27-1.64) | 0.38 |  |

Abbreviations, BMI: Body mass index; AFP: Alpha-Fetoprotein; HOMA-IR: Homeostasis model of assessment - insulin resistance; BCLC: Barcelona Clinic Liver Cancer.

Hazard ratios are not adjusted for other covariates.