**Supplementary Table 3. Univariate analysis of PFS and OS in mRCC patients with ICI plus TKI treatment (n = 52)**

|  |  |  |
| --- | --- | --- |
|  | **PFS2** | **OS** |
|  | **HR(95%CI)** | **P value** | **HR(95%CI)** | **P value** |
| **Gender** |  |  |  |  |
| Male vs. Female | 0.596(0.213-1.671) | 0.326 | 0.477(0.148-1.539) | 0.215 |
| **Age** |  |  |  |  |
| ≥65y vs. <65y | 0.931(0.214-4.061) | 0.925 | 2.022(0.431-9.475) | 0.372 |
| **BMI** |  |  |  |  |
| ≥24 vs. <24 | 0.822(0.307-2.200) | 0.696 | 0.298(0.066-1.347) | 0.116 |
| **Pathological type** |  |  |  |  |
| ccRCC vs. non-ccRCC | 0.508(0.193-1.337) | 0.170 | 0.363(0.121-1.087) | 0.070 |
| **ISUP grade** |  |  |  |  |
| ≥3 vs. <3 | 1.246(0.489-3.173) | 0.644 | 2.041(0.704-5.917) | 0.189 |
| **pT Stage** |  |  |  |  |
| ≥3 vs. <3 | 1.642(0.658-4.099) | 0.288 | 1.985(0.655-6.017) | 0.226 |
| **Metastatic sites (Yes vs No)** |  |  |  |  |
| Lung | 2.773(0.997-7.718) | 0.051 | 2.201(0.688-7.040) | 0.184 |
| Lymph node | 0.761(0.287-2.015) | 0.582 | 0.631(0.195-2.042) | 0.442 |
| Bone | 1.767(0.692-4.515) | 0.234 | 3.069(1.062-8.868) |  0.038\* |
| Liver | 0.905(0.262-3.123) | 0.874 | 1.481(0.408-5.282) | 0.557 |
| Brain | 1. 547(0.357-6.708) | 0.560 | 0.938(0.122-7.211) | 0.951 |
| Others | 0.894(0.276-2.897) | 0.852 | 1.239(0.369-4.164) | 0.729 |
| **Number of metastatic sites** |  |  |  |  |
| <2 vs.≥2 | 0.607(0.246-1.501) | 0.280 | 0.250(0.078-0.798) |  0.019\* |
| **Length of PFS1 time** |  |  |  |  |
| <9 vs. ≥9 mo. | 2.836(1.012-7.953) |  0.048\* | 3.165(0.881-11.370) | 0.077 |
| **Number of IMDC risk factors at initial second-line treatment** |  |  |  |  |
| 0-1 vs. ≥2 | 0.223(0.079-0.628) |  0.013\* | 0.100(0.022-0.452) |  0.007\* |

BMI: body mass index; ccRCC: clear cell renal cell cancer; non-ccRCC: including papillary, chromophobe and other types of RCC; IMDC: International Metastatic Renal-Cell Carcinoma Database Consortium; TKI, tyrosine kinase inhibitors; ICI, immune checkpoint inhibitors

\*p<0.05