**Supplementary Table 1: Distribution analysis of selected demographics factors in glioma cases**

|  |  |  |
| --- | --- | --- |
| **Demographic Feature** | **Glioma cases n=63** | **(%)**  |
| **Age**≥50<50 | 3033 | (47.6)(53.3) |
| **Sex**MaleFemale | 4716 | (74.6)(25.4) |
| **Residence**RuralUrban | 2538 | (39.7)(60.3) |
| **Tumor Type**GlioblastomaAstrocytomaOligidendriogliomaOthers | 32141403 | (53.9)(22.2)(22.2)(4.7) |
| **Grade**IIIIIIIV | 242729 | (3.1)(6.3)(42.9)(46.0) |
| **Vital Status**DeadAlive | 3627 | (57.1)(42.9) |

**Supplementary Table 2: Relation between *IDH*1/2 mutations with different subgroups of malignant glioma**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | ***IDH*1/2****Wild type** | ***IDH*1/2****Mutant** | **P value** |
| **Glioblastoma**MethylatedUnmethylated | 3322 | 46 | 0.2 |
| **Astrocytoma**MethylatedUnmethylated | 106 | 75 | 0.9 |
| **Oligidendrioglioma**MethylatedUnmethylated | 92 | 151 | 0.5 |
| **Low grade**MethylatedUnmethylated | 90 | 30 | 1.0 |
| **High grade**MethylatedUnmethylated | 4429 | 2410 | 0.2 |