***Table S1. WHO classification and IDH mutation status of glioma cell lines applied in our study.***

|  |  |  |  |
| --- | --- | --- | --- |
| ***Cell line*** | ***Age/Gender*** | ***Tumor stage*** | ***IDH1*** |
| U-87MG | 44 yr / Female | Grade IV | Wide type |
| U-118MG | 50 yr / Male | Grade IV | Wide type |
| U-138MG | 47 yr / Male | Grade IV | Wide type |
| U-343MG | 60 yr / Male | Grade IV | Wide type |
| U-373MG | 50 yr / Male | Grade IV | Wide type |
| LNZ308 | 60 yr / Male | Grade IV | Wide type |
| A172 | 53 yr / Male | Grade IV | Wide type |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | All cases | LGG | | GBM | |
| Age |  |  | |  | |
| <49 | 326 | 298 | | 28 | |
| ≥49 | 335 | 212 | | 123 | |
| Unknown | 0 | 0 | | 0 | |
| Total | 661 | 510 | | 151 | |
| Gender |  |  | |  | |
| Male | 352 | 254 | | 98 | |
| Female | 252 | 199 | | 53 | |
| Unknown | 57 | 57 | | 0 | |
| Total | 661 | 510 | | 151 | |
| WHO Grade |  |  | |  | |
|  |  | I | 0 | IV | 151 |
|  |  | II | 226 |  | |
|  |  | III | 240 |  | |
|  |  | Unknown | 44\* |  | |
|  |  | Total | 510 | Total | 151 |
| IDH1 |  |  | |  | |
| Mutant | 423 | 1p19q Co-deletion | 168 | 0 | |
| Non-co-deletion | 245 | 8 | |
| Unknown | 0 | 2 | |
| WT | 231 | 94 | | 137 | |
| Unknown | 7 | 3 | | 4 | |
| Total | 661 | 510 | | 151 | |

***Table S2. Clinical information of the LGG and GBM cohort included for our overall survival analysis from TCGA database.***

\*: the exact grade of the tumor was unknown, but the tumor diagnosed as Astrocytoma or Oligoastrocytoma, which were all considered to be low grade glioma (LGG). WT, wild type.