**Supplementary Table 4. Clinical characteristics of patients in TCGA-GBM cohort**

| Variable | **Subtype 1(N=273)** | **Subtype 2(N=107)** | **P value** | **Overall(N=380)** |
| --- | --- | --- | --- | --- |
| **Age (years)** |  |  |  |  |
| Mean (SD) | 56.4 (14.3) | 61.7 (13.8) | 0.001 | 57.9 (14.3) |
| Median [Min, Max] | 58.0 [10.0, 89.0] | 63.0 [17.0, 88.0] |  | 59.0 [10.0, 89.0] |
| **Gender** |  |  |  |  |
| female | 98 (35.9%) | 47 (43.9%) | 0.191 | 145 (38.2%) |
| male | 174 (63.7%) | 60 (56.1%) |  | 234 (61.6%) |
| Missing | 1 (0.4%) | 0 (0%) |  | 1 (0.3%) |
| **TCGA subtpye** |  |  |  |  |
| Classic-like | 38 (13.9%) | 26 (24.3%) | 0.441 | 64 (16.8%) |
| G-CIMP-high | 5 (1.8%) | 1 (0.9%) |  | 6 (1.6%) |
| G-CIMP-low | 6 (2.2%) | 2 (1.9%) |  | 8 (2.1%) |
| LGm6-GBM | 16 (5.9%) | 6 (5.6%) |  | 22 (5.8%) |
| Mesenchymal-like | 72 (26.4%) | 29 (27.1%) |  | 101 (26.6%) |
| Missing | 136 (49.8%) | 43 (40.2%) |  | 179 (47.1%) |
| **IDH status** |  |  |  |  |
| Mutant | 16 (5.9%) | 5 (4.7%) | 0.737 | 21 (5.5%) |
| WT | 200 (73.3%) | 85 (79.4%) |  | 285 (75.0%) |
| Missing | 57 (20.9%) | 17 (15.9%) |  | 74 (19.5%) |
| **Race** |  |  |  |  |
| ASIAN | 4 (1.5%) | 2 (1.9%) | 0.9 | 6 (1.6%) |
| BLACK OR AFRICAN AMERICAN | 20 (7.3%) | 9 (8.4%) |  | 29 (7.6%) |
| WHITE | 238 (87.2%) | 92 (86.0%) |  | 330 (86.8%) |
| Missing | 11 (4.0%) | 4 (3.7%) |  | 15 (3.9%) |
| **MGMT promoter status** |  |  |  |  |
| Methylated | 82 (30.0%) | 28 (26.2%) | 0.0523 | 110 (28.9%) |
| Unmethylated | 76 (27.8%) | 47 (43.9%) |  | 123 (32.4%) |
| Missing | 115 (42.1%) | 32 (29.9%) |  | 147 (38.7%) |
| **ATRX status** |  |  |  |  |
| Mutant | 7 (2.6%) | 5 (4.7%) | 0.996 | 12 (3.2%) |
| WT | 100 (36.6%) | 59 (55.1%) |  | 159 (41.8%) |
| Missing | 166 (60.8%) | 43 (40.2%) |  | 209 (55.0%) |
| **Chr 7 gain Chr 10 loss** |  |  |  |  |
| Gain chr 7 & loss chr 10 | 182 (66.7%) | 73 (68.2%) | 0.596 | 255 (67.1%) |
| No combined CNA | 80 (29.3%) | 27 (25.2%) |  | 107 (28.2%) |
| Missing | 11 (4.0%) | 7 (6.5%) |  | 18 (4.7%) |
| **1p19q codeletion** |  |  |  |  |
| codel | 1 (0.4%) | 0 (0%) | 1 | 1 (0.3%) |
| non-codel | 265 (97.1%) | 100 (93.5%) |  | 365 (96.1%) |
| Missing | 7 (2.6%) | 7 (6.5%) |  | 14 (3.7%) |