|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Case No.** | **Specimen No.** | **Specimen status** | **Age** | **Gender** | **Tumor type of the case and WHO grade** | | **Primary or recurrence status** | **Treatment history prior to sampling of analyzed material** |
| 9 | (4) D34, D38, D42, D43 | Frozen | 39 | M | Glioblastoma (GBM) | IV | First resection. Newly diagnosed; prior biopsy two weeks earlier | No treatment |
| 15 | (4) B2, C3, H8, K11 | Frozen | 51 | F | Anaplastic oligodendroglioma | III | Recurrent/residual; prior 13 years 4 months earlier | Radiation three years following primary resection |
| 22 | (5) #1, #2, #3, #4, #5 | Frozen | 54 | M | Glioblastoma (GBM) | IV | Recurrent/residual; prior 11 years 8 months earlier | Radiation and PCV chemotherapy following diagnosis of primary tumor |
| 37 | (5) 6A, 6B, 6C, BL1, BL5 | Frozen | 24 | F | Oligoastrocytoma | II to III | Recurrent/residual; prior 7 years 10 months earlier | No treatment |
| 39 | (1) BL6 | Frozen | 35 | F | Anaplastic oligoastrocytoma | III | First resection. Newly diagnosed. | No treatment |
| 42 | (3) A1, B2, J10 | Frozen | 47 | F | Epilepsy |  | First resection | Refractory to multiple anti-epileptic medications |
| 43 | (3) A1#1, A1#2, A1#4 | Fresh | 17 | M | Focal cortical dysplasia |  | First resection | Refractory to multiple anti-epileptic medications |
| 44 | (1) BL5E#1 | Fresh | 52 | F | Oligodendroglioma | II | Recurrent/residual; prior 18 years 3 months earlier | Radiation following primary resection |
| (5) BL5E#2, 6F, 7G, 8H, 10J | Frozen |
| 46 | (4) 02, 03#1, 03#2, 03#3 | Fresh | 66 | M | Glioblastoma (GBM) | IV | Recurrent/residual; prior 2 years earlier | Radiation and temozolomide/vorinostat chemotherapy following diagnosis of primary tumor |
| 50 | (2) 12#1, 12#2 | Fresh | 53 | F | Malignant melanoma |  | Metastatic; Primary (soft tissue right groin) diagnosed 4 months earlier with concurrent invasive breast ductal adenocarcinoma | No treatment |
| 52 | (2) 02, 04 | Fresh | 69 | F | Glioblastoma (GBM, gliosarcoma) | IV | Recurrent/residual; prior 17 months earlier | Radiation and temozolomide chemotherapy and then PD-1 inhibitor (Nivolumab) following diagnosis of primary tumor |
| A1 | (2) 4-4#1, 4-4#2 | Frozen | 56 | M | Autopsy (normal) |  | Death due to myocardial infarction |  |

**Table S1.** Diagnostic results for the surgical specimens from surgical cases.