**Supplementary Table 2. Descriptive statistics of patient population**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Patient**  | **Sex** | **Age** | **Location** | **Frozen** | **Final** | **Grade (\*)**  | **Included in survey or classifier?**  |
| **1** | F | 6 | Brainstem | Glioma, favor low grade | Diffuse intrinsic pontine glioma | Low Grade | Yes |
| **2** | M | 15 | Posterior fossa | Malignant small round blue cell | Malignant small cell neoplasm | High Grade | Yes |
| **3** | M | 5 | Posterior fossa | Glioma, favor pilocytic astrocytoma | Pilocytic astrocytoma | Low Grade | Yes |
| **4** | F | 13 | Posterior fossa | Glioma, favor pilocytic astrocytoma | Low grade astrocytoma  | Low Grade | Yes |
| **5** | F | 34 | Spinal cord | Glial neoplasm, favor ependymoma | Ependymoma, WHO II | Low Grade | Yes |
| **6** | M | 13 | Posterior fossa  | Medulloblastoma | Medulloblastoma  | High Grade | Yes |
| **7** | M | 4 | Posterior fossa  | Favor pilocytic | Pilocytic astrocytoma | Low Grade | Yes |
| **8** | M | 1 | Posterior fossa | Small round blue cell tumor | Medulloblastoma  | High Grade | Yes |
| **9** | M | 12 | Right temporal | Low grade glioma | Ganglioglioma | Low Grade | Yes |
| **10** | M | 5 | Posterior fossa | Medulloblastoma | Medulloblastoma  | High Grade | Yes |
| **11** | F | 26 | Posterior fossa | Possible ganglioglioma | Low grade glioma, favor PXA | Low Grade | Yes |
| **12** | M | 8 | Left occipital | Lesional tissue, favor low grade glioma | Angiocentric glioma, WHO I | Low Grade | Yes |
| **13** | F | 16 | Posterior fossa | Glioma, possible ependymoma | Ependymoma, WHO II | Low Grade | Yes |
| **14** | M | 16 | Right parietal  | Ganglioglioma | Ganglioglioma | Low Grade | Yes |
| **15** | M | 26 | Posterior fossa | Favor hemangioblastoma | Hemangioblastoma | Low Grade | Yes |
| **16** | M | 16 | Posterior fossa | Lesional tissue, favor germinoma | Germinoma | High Grade | Yes |
| **17** | F | 4 | Left frontal | High grade tumor | PNET | High Grade | Yes |
| **18** | M | 3 | Optic pathway | Favor pilocytic | Pilocytic astrocytoma | Low Grade | Yes |
| **19** | M | 1 | Left parietal | Small round blue cell tumor | PNET | High Grade | Yes |
| **20** | M | 3 | Posterior fossa | Pilocytic astrocytoma | Pilocytic astrocytoma | Low Grade | Yes |
| **21** | M | 11 | Right temporal | Low grade glioma | Dysembryoplastic neuroepithelial tumor, WHO grade I | Low Grade | Yes |
| **22** | F | 12 | Posterior fossa | Tumor, favor pilocytic astrocytoma | Pilocytic astrocytoma | Low Grade | Yes |
| **23** | F | 25 | Cervical spinal cord | Glioma, favor ependymoma | Papillary Ependymoma, WHO grade II | Low Grade | No  |
| **24** | M | 58 | Posterior fossa | Choroid plexus papilloma | Choroid plexus papilloma | Low Grade | No  |
| **25** | F | 16 | Clivus | Chordoma | Chordoma | Low Grade | No  |
| **26** | M | 23 | Posterior fossa | Lesional tissue  | Rosette forming glioneuronal tumor (RFGNT) | N/A | No  |
| **27** | M | 16 | Clivus | Chordoma | Chordoma | Low Grade | No  |
| **28** | F | 24 | Clivus | Chordoma | Chordoma | Low Grade | No  |
| **29** | F | 15 | Posterior fossa | Glioma, favor pilocytic astrocytoma | Pilocytic astrocytoma | Low Grade | No  |
| **30** | M | 4 | Optic pathway | Recurrent glioma | Pilocytic astrocytoma | Low Grade | No  |
| **31** | F | 3 | Posterior fossa  | Favor pilocytic | Pilocytic astrocytoma | Low Grade | No  |
| **32** | M | 7 | Posterior fossa | Glioma, favor pilocytic astrocytoma | Pilocytic astrocytoma | Low Grade | No  |
| **33** | M | 16 | Right parietal | Glial neoplasm  | Ganglioglioma | Low Grade | No  |
| **34** | F | 67 | Right frontal | Gliotic brain tissue, few atypical glial cells | Gliotic brain tissue | Normal  | Yes |
| **35** | F | 61 | Left frontal | Reactive brain tissue with few infiltrating cells | Reactive brain tissue | Normal  | Yes |
| **36** |  | 68 | Left parietal | Normal brain tissue | Normal brain tissue | Normal  | Yes |
| **37** | M | 77 | Right temporal | Gliotic brain with atypical cells | Brain tissue | Normal  | Yes |
| **38** | M | 75 | Right temporal | N/A | Cortex and white matter with foci of gliosis | Normal  | Yes |

(\*) Grade, corresponds to the grade that was assigned to the tissue provided for frozen section interpretation.