

**Table S1.** Relationship between age, gender, KPS, and diagnosis (N=190).

Diagnosis	Karnofsky				Gender			
	Age		Performance Score		Female		Male	
	Mean	SD	Mean	SD	N	Row N %	N	Row N %
Astrocytoma grade 3	37	13	80	15	15	40.5%	22	59.5%
Posterior fossa ependymoma grade 3	31	9	65	7	1	33.3%	2	66.7%
Oligodendrogloma grade 3	33	1	85	7	2	100.0%	0	0.0%
Non-neoplastic lesion	44	17	86	16	9	64.3%	5	35.7%
Astrocytoma grade 2	35	15	88	13	31	45.6%	37	54.4%
Ependymoma	44	22	83	15	2	50.0%	2	50.0%
Glioblastoma	43	17	79	12	9	60.0%	6	40.0%
Lymphoma	59	12	84	14	12	70.6%	5	29.4%
Medulloblastoma	34	8	95	7	1	50.0%	1	50.0%
Metastatic tumor	62	9	77	11	3	30.0%	7	70.0%
Not available	45	12	83	17	1	20.0%	4	80.0%
Non-diagnostic biopsy	47	15	78	13	5	62.5%	3	37.5%
Pilocytic astrocytoma	24	7	95	7	4	1000%	0	0.0%
Meningioma grade 1	42	.	90	.	1	100.0%	0	0.0%

Note: N=190; SD - Standard Deviation.

**Table S2.** The relationship between serum antibody status, frequency of magnetic resonance imaging (MRI) contrast enhancement, and diagnosis.

Diagnosis	Epstein–Barr virus seropositivity				Toxoplasmosis seropositivity				Contrast enhancement			
	Negative		Positive		Negative		Positive		No		Yes	
	N	%	N	%	N	%	N	%	No	%	N	%
Astrocytoma grade 3	3	18.8%	13	81.3%	6	35.3%	11	64.7%	10	45.5%	12	54.5%
Non-neoplastic lesion	3	33.3%	6	66.7%	6	66.7%	3	33.3%	5	62.5%	3	37.5%
Astrocytoma grade 2	2	10.0%	18	90.0%	16	80.0%	4	20.0%	25	64.1%	14	35.9%
Ependymoma	0		2	100.0%	2	100.0%	0	0.0%	0	0.0%	3	100.0%
Glioblastoma	0		5	100.0%	0	0.0%	5	100.0%	0	0.0%	9	100.0%
Lymphoma	0		6	100.0%	3	50.0%	3	50.0%	1	9.1%	10	90.9%
Metastatic tumor	0		4	100.0%	0	0.0%	4	100.0%	0	0.0%	6	100.0%
Non-diagnostic biopsy	1	50.0%	1	50.0%	1	50.0%	1	50.0%	4	57.1%	3	42.9%
Pilocytic astrocytoma	0		2	100.0%	2	100.0%	0	0.0%	1	50.0%	1	50.0%

Note:  $N_1 = 66$ ;  $N_2 = 67$ ,  $N_3=112$

**Table S3.** Descriptive statistics of the patient group underwent supratentorial biopsy of cerebral peduncles lesions.

	N	%
Sex		
Female	23	36.5%
Male	40	63.5%
Age, years (mean; SD)	51	16
KPS (mean; SD)	77	15.0%
Diagnosis		
Astrocytoma grade 3	14	22.2%
Glioblastoma	11	17.5%
Lymphoma	11	17.5%
Astrocytoma grade 2	9	14.3%
Metastasis	9	14.3%
Nondiagnostic	2	3.2%
Oligoastrocytoma	2	3.2%
Oligodendrogioma grade 3	1	1.6%
Ependymoma	1	1.6%
Ganglioglioma	1	1.6%
Non neoplastic	1	1.6%
Pilocytic Astrocytoma	1	1.6%
Multifocal tumors	4	100%
Lymphoma	1	25%
Astrocytoma grade 2	1	25%
Glioblastoma	1	25%
Metastasis	1	25%
Molecular evaluation*		
IDH-mutant	1	20%
IDH-wildtype	4	80%

<i>MGMT</i> methylated	4	80%
<i>MGMT</i> unmethylated	1	20%
1p/19q codeleted	1	20%
1p/19q noncodeleted	4	80%

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*Note:* KPS - Karnofsky Performance Scale. SD - Standard Deviation. NA - not available. \* - Biopsy material was subjected to molecular testing in 6 patients, which was non-diagnostic in one patient.