

Supplementary table 3. Associations between clinical characteristics and detection of CSF ctDNA.

Characteristic assessed	All patients (n=57)	CSF detected (n=47)	CSF undetected (n=10)	P value
Age (y) median (range)	12.0 (3.7-56.0)	12.0 (3.7-56.0)	15.5 (5.5-49.0)	0.431
Sex, no. (%)				0.869
Female	27 (47.4)	23 (48.9)	4 (40.0)	
Male	30 (52.6)	24 (51.1)	6 (60.0)	
Tumor grade, no. (%)				0.001
1	7 (12.3)	2 (4.3)	5 (50.0)	
2	14 (24.6)	12 (25.5)	2 (20.0)	
3	16 (28.1)	15 (31.9)	1 (10.0)	
4	18 (31.6)	17 (36.2)	1 (10.0)	
Inconclusive	2 (3.5)	1 (2.1)	1 (10.0)	
Tumor grade, no. (%)				0.022
1 and 2	21 (36.8)	14 (29.8)	7 (70.0)	
3 and 4	34 (59.6)	32 (68.1)	2 (20.0)	
Inconclusive	2 (3.5)	1 (2.1)	1 (10.0)	
Enhancing CT or MRI, no. (%)				0.741
No	23 (40.4)	18 (38.3)	5 (50.0)	
Yes	34 (59.6)	29 (61.7)	5 (50.0)	
Tumor location, no. (%)				0.169 ^a
Pontine	30 (52.6)	27 (57.4)	3 (30)	
4 th ventricle	4 (7.0)	4 (8.5)	0 (0)	
Medullary	9 (15.8)	6 (12.8)	3 (30)	
Midbrain	3 (5.3)	2 (4.3)	1 (10)	
MP	2 (3.5)	1(2.1)	1 (10)	
PO	2 (3.5)	2 (4.3)	0 (0)	
TM	3 (5.3)	3 (6.4)	0 (0)	
Thalamus	2 (3.5)	1 (2.1)	1 (10)	
Temporal lobe	1 (1.8)	0 (0)	1(10)	
Lateral ventricle	1 (1.8)	1 (2.1)	0 (0)	
Abutting CSF space, no. (%)				0.028
Yes	55 (96.5)	47 (100)	8 (80)	
No	2 (3.5)	0 (0)	2 (20)	
Symptom duration				0.05
Median (range)	3.0(0.5-120)	2.0 (0.5-120)	4.5 (2.5-24)	
Tumor size				0.097
Median (range)	20.2 (0.95-74.35)	21.2 (0.95-74.35)	8.96 (1.52-61.24)	
Quantity of DNA in CSF (ng)				0.022
Median (range)	25.0(5.2-1845.0)	25.7 (5.5-1845.0)	12.2 (5.2-58.5)	

^a p value for the comparison between Pontine/MP/PO vs. Midbrain/Medulla, Chi-square test