

SUPPLEMENTAL TABLE 1. Summary of Patient Characteristics, Imaging Findings, and Outcome

Patient no.	Sex	Age (y)	Initial symptom	Disease extension	Histology	WHO grade	MR imaging contrast enhancement	¹⁸ F-DOPA PET/MR imaging	SUVmax	T/N	T/S	Indication for ¹⁸ F-DOPA scan	Contribution of ¹⁸ F-DOPA PET/MR imaging	Treatment response or outcome at the end of follow-up	Follow-up time (mo)
1	M	14	Unspecific	L-T, F	Diffuse astrocytoma	II	No	No uptake	0.7	1	0.7	Baseline evaluation/ after biopsy	Changed treatment strategy	Stable disease	31
2	M	10	Headache	R-F, P	Diffuse astrocytoma	II	No	No uptake	0.4	1	0.6	Baseline evaluation/ before biopsy	Changed treatment strategy	Stable disease	44
3	F	11	Seizures	R-T, F	Diffuse astrocytoma	II	No	Moderately increased uptake	0.7	1.5	0.8	Baseline evaluation/ after biopsy	None	Partial response	8
4	M	10	Headache	R-T, F	Diffuse astrocytoma	II	No	No uptake	0.5	1	0.6	Baseline evaluation/ before biopsy	Changed treatment strategy	Stable disease	27
5	M	14	Unspecific	R and L P	Diffuse astrocytoma	II	No	No uptake	0.4	1	0.5	Baseline evaluation/ before biopsy	Changed treatment strategy	Stable disease	8
6	F	6	Seizures	L-F, P	Anaplastic astrocytoma	III	No	Markedly increased uptake	2.1	2.2	1.2	Suspected disease progression on MR	Differentiated between PD and treatment related changes	PD and DOD	5

												imaging			
7	M	14	Headache	L-T, P	Anaplastic astrocytoma	III	No	Markedly increased uptake	1.3	2	1.1	Baseline evaluation/ before biopsy	Guided biopsy site	PD	12
8	F	17	Seizures	L-T, F	Glioblastoma multiforme	IV	No	Markedly increased uptake	1.8	2.3	1.2	Baseline evaluation/ after biopsy	None	Stable disease	20
9	M	13	Seizures	R-T, F, P	Gliomatosis cerebri (diffuse astrocytoma)	II	No	Moderately increased uptake	0.9	1.3	0.8	Baseline evaluation/ after biopsy	None	Stable disease	32
10*	M	8	Seizures	L-T, F, P, BG	Gliomatosis cerebri (diffuse astrocytoma)	II	No	Markedly increased uptake	2.7	2.3	1.2	Baseline evaluation/ after biopsy	Changed treatment strategy	PD	25
												Follow-up on prior ¹⁸ F-DOPA scan	Differentiated between PD and treatment-related changes		
11	F	6	Seizures	R-T, F, P, Th	Gliomatosis cerebri (anaplastic astrocytoma)	III	No	Markedly increased uptake	2.1	1.7	1.2	Baseline evaluation/ before biopsy	Guided biopsy site	PD and DOD	9
12	F	17	Headache	L-F, P, Th, R-Th	Gliomatosis cerebri (anaplastic astrocytoma)	III	No	Markedly increased uptake	2.3	3.4	1.5	Suspected disease progression on MR imaging	Differentiated between PD and treatment related changes	PD	8
13	M	8	Seizures	L-F, P, O, BG, Th	Gliomatosis cerebri	IV	Yes	Markedly increased	1.8	2.3	1.4	Baseline evaluation/	None	PD	4

					(glioblastoma multiforme)			uptake				after biopsy			
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*Two ¹⁸F-DOPA PET/MR imaging scans were obtained.

T = temporal; F = frontal; P = parietal; BG = basal ganglia; Th = thalamus; DOD = died of disease; O = occipital.