

**Supplementary Materials:**

**Table S1.** Patients' data and diagnosis.

Case	Age	SEX	Diagnosis
1FA	55	M	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
2CS	46	F	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
3GG	65	M	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
8SA	61	F	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
9RN	49	F	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
10FC	57	F	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
27FG	61	F	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
29MM	63	M	Glioblastoma Grade IV CNS- WHO2021, IDH wild type
30LR	49	M	Glioblastoma Grade IV CNS- WHO2021, IDH wild type

**Table S2.** Molecular data.

Case	IDH1 mutation	ATRX Mutation	TP53 expression	Ki67 %	GFAP	EGFR overexpression
1FA	No	No	Yes	40%	Positive	Yes
2CS	No	No	Yes	30%	Positive	Yes
3GG	No	No	Yes	20%	Positive	Yes
8SA	No	No	Yes	15%	Positive	Yes
9RN	No	No	Yes	20%	Positive	Yes
10FC	No	No	Yes	10%	Positive	Yes
27FG	No	No	Yes	15%	Positive	Yes
29MM	No	No	Yes	15%	Positive	Yes
30LR	No	No	Yes	40%	Positive	Yes

**Table S3.** Histological data.

Case	HPF Mitosis x/10	Cellularity	Nuclei	Neo-vascularization	Necrosis
1FA	8/10	Higher	Pleomorphic	Yes	Yes
2CS	7/10	Higher	Pleomorphic	Yes	Yes
3GG	6/10	Higher	Pleomorphic	Yes	Yes
8SA	4/10	Higher	Pleomorphic	Yes	Yes
9RN	8/10	Higher	Pleomorphic	Yes	Yes
10FC	6/10	Higher	Pleomorphic	Yes	No
27FG	6/10	Higher	Pleomorphic	Yes	Yes
29MM	3/10	Lower	Pleomorphic	Yes	Yes
30LR	3/10	Lower	Pleomorphic	Yes	Yes

**Table S4.** Morphological data from picture analysis and relation with Ki67 index.

<b>Case</b>	<b>Ki67%</b>	<b>% of MsEVs</b>	<b>% of NCsM</b>	<b>% of MsLVs</b>
1FA	40	27	3	16
2CS	30	25	18	9
3GG	20	23	17	4
8SA	15	14	16	2
9RN	20	16	21	1
10FC	10	12	19	1
27FG	15	14	20	2
29MM	15	12	15	1
30LR	40	11	17	1