S1 Table. Univariate and multivariate analyses for PFS and OS

Variables	Univariate analysis HR PFS	OS	95% CI PFS	OS	P value* PFS	OS	Multivariate HR PFS	OS†	95% CI PFS	OS†	P value PFS	OS†
	HR		**95% CI**		**P value***		**HR**		**95% CI**		**P value**	
	PFS	OS	PFS	OS	PFS	OS	PFS	OS†	PFS	OS†	PFS	OS†
Type	0.268	0.267	0.037 – 1.967	0.035 – 2.038	0.196	0.203	-	-	-	-	-	-
Gender	0.532	0.670	0.315 – 0.900	0.408 – 1.098	**0.019**	0.112	0.722	-	0.324 – 1.611	-	0.427	-
BMI	0.968	0.960	0.931 – 1.006	0.925 – 0.996	0.098	**0.028**	-	-	-	-	-	0.269
IDH mutation	0.186	0.037	0.045 – 0.770	0.001 – 1.008	**0.020**	0.051	0.195	-	0.039 – 0.970	-	**0.046**	-
MGMT methylation	0.656	0.553	0.322 – 1.338	0.258 – 1.183	0.247	0.127	-	-	-	-	-	-
EGFR mutation												
EGFR mutation vs without	1.444	2.205	0.531 – 3.927	0.778 – 6.255	0.471	0.137	-	-	-	-	-	-
EGFRvIII vs without	1.050	0.187	0.207 – 5.330	0.022 – 1.583	0.953	0.124	-	-	-	-	-	-
Ki67	0.995	0.994	0.983 – 1.008	0.981 – 1.008	0.474	0.406	-	-	-	-	-	-
GFAP mutation	0.737	0.817	0.099 – 5.462	0.111 – 6.017	0.765	0.843	-	-	-	-	-	-
Temozolomide	1.182	0.425	0.767 – 1.823	0.177 – 1.024	0.449	0.056	-	-	-	-	-	-
Temozolomide average dose	0.996	0.995	0.992 – 0.999	0.991 – 0.999	**0.020**	**0.018**	0.999	-	0.994 – 1.004	-	0.690	0.586
Radiotherapy	0.094	0.101	0.038 – 0.228	0.050 – 0.203	**<0.001**	**<0.001**	0.523	-	0.062 – 4.425	-	0.552	0.456
Radiotherapy total dose	0.995	0.972	0.971 – 1.020	0.948 – 0.997	0.717	**0.029**	-	-	-	-	-	-
Received another chemotherapy	0.820	0.742	0.501 – 1.343	0.454 – 1.211	0.431	0.233	-	-	-	-	-	-
Dexamethasone	2.643	2.536	1.419 – 4.922	1.336 – 4.816	**0.002**	**0.004**	3.599	-	1.197 – 10.819	-	**0.023**	0.231
Anti-convulsants	1.153	1.278	0.691 – 1.926	0.769 – 2.123	0.585	0.344	-	-	-	-	-	-
Neurological conditions	0.687	1.015	0.275 – 1.716	0.461 – 2.234	0.422	0.970	-	-	-	-	-	-
Dyslipidaemia/hypercholesterolaemia	0.966	0.906	0.567 – 1.648	0.524 – 1.564	0.900	0.722	-	-	-	-	-	-
Type II diabetes	0.888	0.761	0.474 – 1.664	0.405 – 1.430	0.711	0.396	-	-	-	-	-	-
Hypertension	0.955	0.812	0.577 – 1.580	0.489 – 1.348	0.857	0.420	-	-	-	-	-	-
Depression	2.388	1.923	0.994 – 5.737	0.820 – 4.508	0.052	0.133	-	-	-	-	-	-
Other cancer	2.100	2.217	0.948 – 4.652	0.988 – 4.977	0.067	0.054	-	-	-	-	-	-
Previous surgery	1.838	2.065	1.045 – 3.231	1.192 – 3.575	**0.035**	**0.010**	1.948	2.825	0.874 – 4.345	1.234 – 6.466	0.103	**0.014**
Age at diagnosis	1.019	1.026	1.002 – 1.036	1.008 – 1.045	**0.029**	**0.006**	0.987	-	0.959 – 1.016	-	0.378	0.530
EOR												
STR vs biopsy	0.252	0.288	0.112 – 0.567	0.146 – 0.567	**0.001**	**<0.001**	0.408	0.205	0.102 – 1.628	0.061 – 0.697	0.204	**0.011**
GTR vs biopsy	0.111	0.130	0.046 – 0.267	0.061 – 0.280	**<0.001**	**<0.001**	0.325	0.145	0.071 – 1.490	0.039 – 0.539	0.148	**0.004**
Preoperative												
ECOG												
1 vs 0	1.039	0.810	0.616 – 1.753	0.484 – 1.357	0.886	0.423	-	-	-	-	-	-
2 vs 0	1.488	1.406	0.510 – 4.342	0.534 – 3.701	0.467	0.490	-	-	-	-	-	-
3 vs 0	1.341	1.399	0.179 – 10.060	0.187 – 10.441	0.775	0.744	-	-	-	-	-	-
Dexamethasone	1.449	1.282	0.852 – 2.465	0.756 – 2.175	0.171	0.357	-	-	-	-	-	-
NLR	1.057	1.002	0.631 – 1.773	0.604 – 1.662	0.833	0.994	-	-	-	-	-	-
PNI	0.922	0.566	0.522 – 1.629	0.332 – 0.964	0.780	**0.036**	-	-	-	-	-	0.369
Postoperative												
ECOG												
1 vs 0	1.260	1.787	0.710 – 2.235	0.961 – 3.322	0.430	0.066	0.417	-	0.179 – 0.973	-	**0.043**	0.115
2 vs 0	1.739	3.057	0.845 – 3.578	1.522 – 6.141	0.133	**0.002**	0.645	-	0.211 – 1.975	-	0.443	0.797
3 vs 0	3.795	5.471	1.597 – 9.023	2.278 – 13.135	**0.003**	**<0.001**	0.900	-	0.198 – 4.090	-	0.892	0.056
4 vs 0	0.000	9.587	0.000 – 0.000	2.079 – 44.208	0.982	**0.004**	-	-	-	-	-	0.057
Dexamethasone	1.806	2.581	1.092 – 2.985	1.525 – 4.370	**0.021**	**<0.001**	0.968	-	0.477 – 1.965	-	0.928	0.140
NLR	1.395	1.832	0.783 – 2.484	1.054 – 3.185	0.258	**0.032**	-	-	-	-	-	0.179
PNI	0.501	0.436	0.296 – 0.846	0.259 – 0.735	**0.010**	**0.002**	0.804	-	0.390 – 1.659	-	0.555	0.151

BMI = body mass index, IDH = isocitrate dehydrogenase, MGMT = O^6methylguanine DNA methyltransferase, EGFR = epidermal growth factor receptor, GFAP = glial fibrillary acidic protein, EOR = extent of resection, STR = subtotal resection, GTR = gross total resection, ECOG = Eastern Cooperative Oncology Group, NLR = neutrophil to lymphocyte ratio, PNI = prognostic nutritional index

*P values in bold are significant, †Results from multivariate analysis with forward selection process