

**Table S1.** Grade III glioma diagnosis based on molecular biomarkers and histological reevaluation.

Patient ID	WHO 2007 diagnosis	IDH1 mutation	ATRX status	1p19q status	WHO 2016 diagnosis
1	AA	-	-	-	AA, NOS
2	AOA	Neg	Intact	Retained	GBM, IDH wt
3	AO	Pos	Intact	Inconclusive	AOD, IDH mut
4	AA	Pos	Loss	Retained	AA, IDH mut
5	AO	-	-	-	AOD, NOS
6	AOD	Pos	Intact	Retained	AOD, IDH mut
7	AO	Pos	Loss	Retained	AA, IDH mut
8	AOD	-	-	Co-deleted	AOD, 1p/19q co-deleted
9	AA	Pos	Intact	Inconclusive	AA, IDH mut
10	AOA	Neg	Loss	Retained	AA, IDH wt
11	AOA	Neg	Loss	Retained	AA, IDH wt
12	AA	Pos	Intact	Retained	AA, IDH mut
13	AOA	Pos	Loss	Retained	AA, IDH mut
14	AA	-	-	-	AA, NOS
15	AA	Neg	Loss	Partial	AA, IDH wt
16	AOA	Pos	Intact	Inconclusive	AA, IDH mut
17	AOA	Pos	Intact	Co-deleted	AOD, IDH mut and 1p/19q co-deleted
18	AOD	Pos	Intact	Inconclusive	AOD, IDH mut
19	AA	Neg	Intact	Inconclusive	GBM, IDH wt
20	AA	Neg	Loss	Retained	AA, IDH wt
21	AA	Pos	Loss	Retained	AA, IDH mut
22	AA	Pos	Loss	Retained	AA, IDH mut
23	AA	-	-	Retained	AA, NOS
24	AOD	Pos	Intact	Partial	AOD, IDH mut
25	AA	Pos	Loss	Retained	AA, IDH mut
26	AOA	Neg	Loss	Co-deleted	AOD, IDH wt and 1p/19q co-deleted
27	AOA	Pos	Intact	Retained	AA, IDH mut
28	AOD	Pos	Intact	Co-deleted	AOD, IDH mut and 1p/19q co-deleted
29	AOD	Pos	Intact	Co-deleted	AOD, IDH mut and 1p/19q co-deleted
30	AOA	Pos	Loss	Inconclusive	AA, IDH mut
31	AA	Pos	Loss	Retained	AA, IDH mut
32	AOD	Pos	Intact	Inconclusive	AOD, IDH mut
33	AOD	Neg	Intact	Retained	GBM, IDH wt
34	AA	Pos	Intact	Retained	AA, IDH mut
35	AA	-	-	-	AA, NOS
36	AOD	Neg	Intact	Retained	GBM, IDH wt
37	AOD	Neg	Intact	Retained	GBM, IDH wt
38	AOD	Pos	Intact	Co-deleted	AOD, IDH mut and 1p/19q co-deleted
39	AOA	Pos	Intact	Retained	AA, IDH mut
40	AOA	Neg	Intact	Inconclusive	GBM, IDH wt
41	AOD	Neg	Loss	Retained	AA, IDH wt
42	AA	Pos	Intact	Retained	AA, IDH mut
43	AOA	Pos	Intact	Co-deleted	AOD, IDH mut and 1p/19q co-deleted
44	AOA	Neg	Loss	Retained	AA, IDH wt
45	AA	Pos	Loss	Retained	AA, IDH mut
46	AA	Pos	Intact	Inconclusive	AA, IDH mut
47	AOA	Neg	Intact	Inconclusive	AA, IDH wt

48	AOD	-	-	-	AOD, NOS
49	AOD	-	-	Retained	AOD, IDH wt
50	AOA	Neg	Loss	Retained	AA, IDH wt
51	AOA	Pos	Loss	Retained	AA, IDH mut
52	AA	Neg	Loss	Retained	AA, IDH wt
53	AOD	Pos	Loss	Retained	AA, IDH mut
54	AOD	Neg	Intact	Retained	GBM, IDH wt
55	AA	Pos	Loss	Retained	AA, IDH mut
56	AOD	Neg	Intact	Retained	GBM, IDH wt
57	AOA	Pos	Loss	Retained	AA, IDH mut
58	AA	Pos	Loss	Retained	AA, IDH mut
59	AOA	Pos	Loss	Retained	AA, IDH mut
60	AOD	Pos	Intact	Co-deleted	AOD, IDH mut and 1p/19q co-deleted
61	AOD	-	-	-	AOD, NOS
62	AA	-	-	-	AA, NOS