

Online resource 4 – Multivariate analyses with adjuvant treatment and WHO grade.

Title

IDH mutation status and role of WHO grade and mitotic index in overall survival in grade II-III diffuse gliomas

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Authors: Adriana Olar, Khalida M. Wani, Kristin Diefes, Lindsey E. Heathcock, Hinke F. van Thuijl, Mark R. Gilbert, Terri S. Armstrong, Erik P. Sulman, Daniel P. Cahill, Elizabeth Vera-Bolanos, Ying Yuan, Jaap C. Reijneveld, Bauke Ylstra, Pieter Wesseling, Kenneth D. Aldape

Corresponding authors:

Adriana Olar, MD

The University of Texas MD Anderson Cancer Center

Dept. of Pathology, G1.3510

1515 Holcombe Blvd.

Houston, TX, 77030, USA

Email: adriana_olar@yahoo.com

Kenneth Aldape, MD

Princess Margaret Cancer Centre and Ontario Cancer Institute

610 University Ave

Toronto, ON M5G 2M9, Canada

Email: ken.aldape@uhnresearch.ca

Table S4.1: Cox multivariate analysis among all 439 diffuse glioma cases on which adjuvant treatment data were available; with mitotic index (A) and with WHO grade (B).

A

Variable	p-value	Hazard Ratio	95% CI
IDH status (mut vs wt)	<0.0001	0.36	0.25-0.52
1p/19q status (codel vs non-codel)	<0.0009	0.57	0.40-0.79
Mitotic index (high vs low)	<0.0001	2.00	1.49-2.68
Age	<0.0001	1.03	1.02-1.04
Adjuvant chemotherapy (yes vs. no)	0.1900	0.82	0.61-1.10
Adjuvant radiation (yes vs. no)	0.0020	0.58	0.41-0.82

B

Variable	p-value	Hazard Ratio	95% CI
IDH status (mut vs. wt)	<0.0001	0.34	0.24-0.49
1p/19q status (codel vs. non-codel)	<0.0060	0.63	0.45-0.88
WHO grade (III vs. II)	0.1388	1.28	0.92-1.77
Age	<0.0001	1.03	1.02-1.04
Adjuvant chemotherapy (yes vs. no)	0.0956	0.78	0.58-1.05
Adjuvant radiation (yes vs. no)	0.0179	0.65	0.45-0.93

CI: confidence interval, codel – co-deleted, mut – mutant, wt – wild-type.

Table S4.2: Cox multivariate analysis on 373 IDH-mutant cases on which adjuvant treatment data were available; with mitotic index (A) and with WHO grade (B).

A

Variable	p-value	Hazard Ratio	95% CI
1p/19q status (codel vs. non-codel)	0.0052	0.62	0.44-0.87
Mitotic index (high vs. low)	0.0566	1.41	0.99-2.02
Age	0.3229	1.01	0.99-1.02
Adjuvant chemotherapy (yes vs. no)	0.2433	0.82	0.59-1.14
Adjuvant radiation (yes vs. no)	0.0028	0.55	0.37-0.81

B

Variable	p-value	Hazard Ratio	95% CI
1p/19q status (codel vs. non-codel)	0.0098	0.64	0.46-0.90
WHO grade (III vs. II)	0.4804	1.14	0.79-1.64
Age	0.3696	1.01	0.99-1.02
Adjuvant chemotherapy (yes vs. no)	0.1424	0.78	0.56-1.09
Adjuvant radiation (yes vs. no)	0.0140	0.59	0.39-0.90

CI: confidence interval, codel – co-deleted, mut – mutant, wt – wild-type.

Table S4.3: Cox multivariate analysis on 66 IDH-wild type cases on which adjuvant treatment data were available; with mitotic index (A) and with WHO grade (B).

A

Variable	p-value	Hazard Ratio	95% CI
Mitotic index (high vs. low)	0.0015	3.10	1.54-6.24
Age	<0.0001	1.04	1.02-1.06
Adjuvant chemotherapy (yes vs. no)	0.8990	0.95	0.44-2.06
Adjuvant radiation (yes vs. no)	0.8367	0.92	0.41-2.05

B

Variable	p-value	Hazard Ratio	95% CI
WHO grade (III vs. II)	0.0363	2.25	1.05-4.79
Age	<0.0001	1.06	1.04-1.08
Adjuvant chemotherapy (yes vs. no)	0.8539	0.93)	(0.44-1.99)
Adjuvant radiation (yes vs. no)	0.6839	0.85	0.38-1.89

CI: confidence interval.