

Supplementary material 5

**MITOTIC INDEX IS AN INDEPENDENT PREDICTOR OF
RECURRENCE-FREE SURVIVAL IN MENINGIOMA**

Brain Pathology

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Table S5.1: The median Ki-67 index among all WHO meningioma grades.

WHO grade	Median Ki-67 index (range)
I	2.95 (0-23)
II	9.4 (1.2-36.4)
III	33.5 (12.4-88.7)

MIB-1 cutoffs were calculated using the PERCENTRANK function (Excel for Mac v. 2011). The following significant cutoffs/subgroups were identified: 0-2.5%, 2.6-6.6%, and >6.7%.

On univariate analysis (Cox proportional hazard) these MIB-1 subgroups were predictive of RFS ($p < 0.01$, HR=1.93, 95%CI=1.52-2.46). Kaplan-Meier survival curves are represented in **Figure S5.1**.

On multivariate analysis MIB-1 subgroups and Simpson grade were predictive of RFS, while the WHO grade and the mitotic index were not (**Table S5.2**). However, when mitotic index subgroups replaced mitotic index in multivariate analysis, (Table S5.3) it became strongly associated with RFS while MIB-1 subgroups did not.

Table S5.2: Multivariate analysis including mitotic index as a continuous variable in the model.

Variable	p-value	Hazard Ratio	95% CI
WHO	0.1640	1.40	0.87-2.27
MIB subgroups	0.0319	1.38	1.02-1.87
Mitotic index	0.0890	1.05	0.99-1.11
Simpson grade	<0.01	1.69	1.43-1.99

Table S5.3: Multivariate analysis including mitotic index subgroups (0-2, 3-4, ≥ 5) in the model.

Variable	p-value	Hazard Ratio	95% CI
WHO	0.3883	1.23	0.76-1.99
MIB subgroups	0.1146	1.28	0.94-1.75
Mitotic index subgroups	0.0074	1.57	1.12-2.19
Simpson grade	<0.01	1.69	1.43-2.00

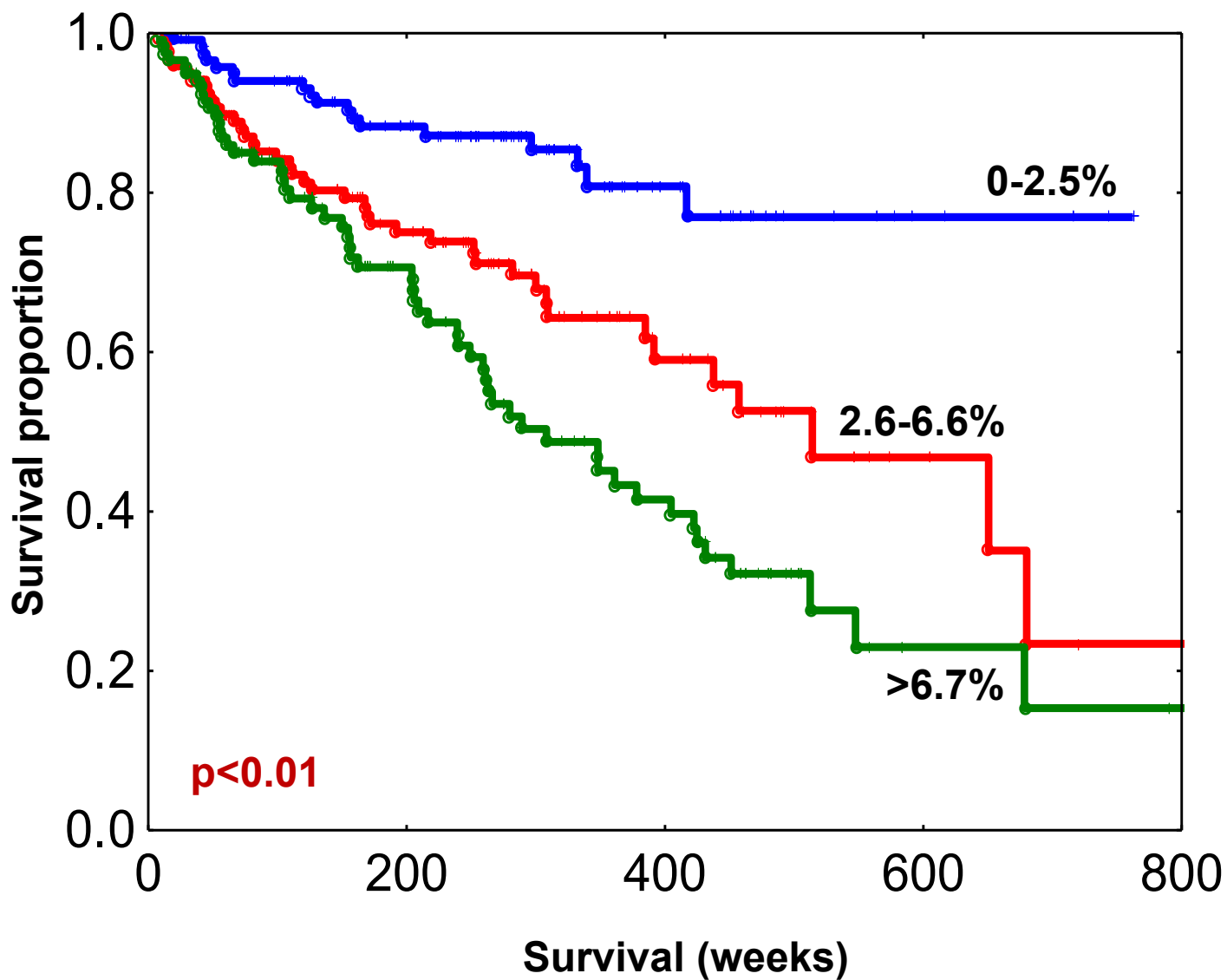


Figure S5.1: MIB-1 subgroups separates risk-groups among all WHO grade meningiomas (Kaplan-Meier survival curve).