**Online Resource 5:** Logistic regression analysis estimating the relationship between repeated microsurgical resection of an intracranial tumor and mortality three months after surgery. The multivariable analysis is adjusted for baseline differences in age, sex, histological diagnosis, size and posterior fossa location of the tumor.

M3 mortality	Univariable analysis			Multivariable analysis		
	OR	95% CI	p-value	aOR	95% CI	p-value
Repeated surgery	0.98	0.58 - 1.65	0.936	1.32	0.77 – 2.29	0.307
Age (per year)	-	-	-	1.05	1.03 - 1.06	< 0.001
Male sex	-	-	-	1.14	0.74 – 1.74	0.547
Tumor size (per increase in category)	-	-	-	1.62	1.10 - 2.38	0.014
Histology	-	-	-	1.11	1.04 - 1.18	0.002
Posterior fossa location	-	-	-	1.47	0.88 - 2.46	0.138

This online supplementary document is part of the article "Repeated craniotomies for intracranial tumors: is the risk increased? Pooled analysis of two prospective, institutional registries of complications and outcomes" by Costanza Maria Zattra<sup>1,2</sup>, MD; David Y. Zhang<sup>1</sup>, MSc; Morgan Broggi<sup>2</sup>, MD, PhD; Julia Velz<sup>1</sup>, MD; Flavio Vasella<sup>1</sup>, MD; Dominik Seggewiss<sup>1</sup>, MD; Silvia Schiavolin<sup>3</sup>, PsyD; Oliver Bozinov<sup>1</sup>, MD; Niklaus Krayenbühl<sup>1</sup>, MD; Johannes Sarnthein<sup>1</sup>, PhD; Paolo Ferroli<sup>2</sup>, MD; Luca Regli<sup>1</sup>, MD; Martin N. Stienen<sup>1</sup>, MD, FEBNS

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