

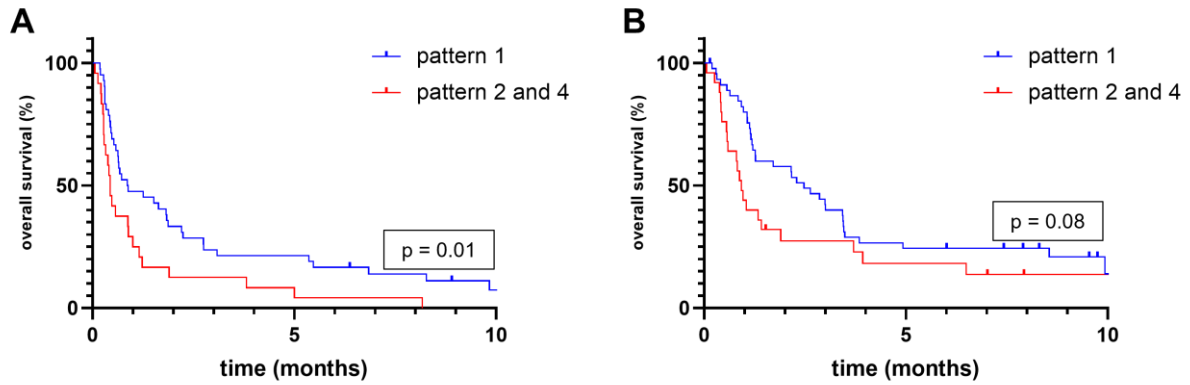
Supplementary material

Suppl. Table 1. Differentiation between edema and non-contrast-enhancing tumor

Differential features on T2/FLAIR-weighted MRI	
Edema	nCEV
Marked hyperintensity, peripheral fading	Mild hyperintensity
Concentric, finger-like spread	Eccentric spread
Grey matter sparing	Grey matter infiltration and inflation
Respecting anatomical borders	Distortion of anatomical structures
Mass effect if generalized	Focal mass effect

Adapted by Lasocki A et al., *AJNR Am J Neuroradiol.*, 2019

FLAIR, Fluid attenuated inversion recovery; MRI, magnetic resonance imaging; nCEV, non-contrast-enhancing tumor volume.



Suppl. Fig. 1. Progression-free survival (PFS) (A) and overall survival (OS) (C) of intersectional tumor volume pattern 1 versus pattern 2 and 4. Pattern 1 was associated with significantly longer PFS than patterns 2 and 4 (PFS, in months; 10.4 versus 5.3, $p=0.01$) (A). There was a trend towards longer OS in patients with pattern 1 (OS, in months; 29.8 versus 11, $p=0.08$). Pattern 1: non-enhancing tumor volume (nCEV) is larger than the biological tumor volume (BTV) and encloses all or most of it. Pattern 2: BTV is larger than nCEV and encloses all or most of it. Pattern 4: nCEV and BTV are similar in size, the exclusive tumor volumes are larger than the intersectional tumor volume.