

## SUPPLEMENTAL FIGURE 1. MRI and FET-PET of tumor progression following anti-angiogenic therapy

**1A:** cT1-weighted baseline MRI (*a*) as compared to the last available MRI scan (*d*) shows a significant decrease in contrast-enhancement. However, comparison of hT2-weighted baseline images (*b*) and at the last follow-up (*e*) demonstrates a slow but stepless increase in hT2 signal pathology (arrows) suggestive of the development of a gliomatotic tumor growth pattern. FET-PET (*c*, *f*) shows a steady increase in moderate metabolic activity.

**1B-C:** cT1-weighted baseline MRI (*Ba, Ca*) as compared to the last available MRI scans shows distinct (*Bd*) or moderate (*Cd*) contrast-enhancement (arrows). T2-weighted sequences (*Bb, Be*) reveal an increase in hT2 signal pathology, consistent with tumor progression and peritumoral edema. In contrast, *S-Figure 1Cd* shows a kind of solid "knotty" hT2 signal abnormality (arrows). In both cases FET-PET shows significantly increased metabolic activity of the solid tumor masses seen in T2 sequences (*S-Figure 1B c,f and 4C c,f*; arrows)