



ON-LINE FIG 1. RSI analysis of a 51-year-old man with right frontal GBM (patient 1). *A*, Illustration of the RSI ADC “spectrum” model used to fit the multi-b-factor DWI-MRI data. Scales 0–2 and 3–6 correspond to restricted and hindered diffusion, respectively. Scales 0, 6, and 7 are isotropic, while scales 1–5 are anisotropic (ie, oriented). *B*, RSI-derived (T2-weighted) volume fraction maps for each scale in *A*. T1-weighted postcontrast (*C*), T2-weighted FLAIR (*D*), an RSI-derived “cellularity map” (*E*), corresponding to a weighted (“beamformed”) linear combination of scales 0–7, showing maximal sensitivity and specificity to spherically-restricted diffusion (scale 0). *F*, Example of the ADC “spectrum” for 2 representative voxels in tumor and necrotic tissue, respectively.