

**Table S1** The details of scanning schemes for each sequence

XXXXXX	T1WI	CE-T1WI	T2WI	T2-FLAIR
TR/TE (ms)	2,000/20	2,000/20	3,000/80	11,000/125
Voxel (mm <sup>3</sup> )	0.55×0.80×5	0.55×0.80×5	0.50×0.65×5	0.65×0.87×5
Slices	28	28	28	28
FOV (cm <sup>2</sup> )	23×18.3	23×18.3	23×18.3	23×18.3

CE-T1WI, contrast-enhanced T1-weighted imaging; FOV, field of view; TE, echo time; TR, repetition time; T1WI, T1-weighted imaging; T2-FLAIR, T2-weighted fluid-attenuated inversion recovery.

**Table S2** The interobserver variability of ALPS index and DTI metrics

Metrics	ICC	95% CI	P value
ALPS index in TR	0.763	0.592–0.862	<0.0001
ALPS index in PsP	0.825	0.712–0.894	<0.0001
ALPS index in HC	0.698	0.555–0.794	<0.0001
FA	0.837	0.740–0.898	<0.0001
MD	0.957	0.932–0.973	<0.0001
AD	0.966	0.946–0.979	<0.0001
RD	0.950	0.920–0.968	<0.0001

AD, axial diffusivity; ALPS, analysis along the perivascular space; CI, confidence intervals; DTI, diffusion tensor imaging; FA, fractional anisotropy; HC, healthy control; ICC, intraclass correlation coefficient; MD, mean diffusivity; PsP, pseudoprogession; RD, radial diffusivity; TR, tumor recurrence.

**Table S3** Spearman rank correlations between ALPS index and DTI metrics

ALPS index	FA	MD	AD	RD
Ipsilateral ALPS	-0.130 (P=0.382)	0.177 (P=0.234)	0.156 (P=0.294)	0.167 (P=0.261)
Contralateral ALPS	-0.228 (P=0.054)	0.100 (P=0.402)	0.093 (P=0.438)	0.101 (P=0.399)

Data presented as Spearman's rank correlation coefficients. AD, axial diffusivity; ALPS, analysis along the perivascular space; DTI, diffusion tensor imaging; FA, fractional anisotropy; MD, mean diffusivity; RD, radial diffusivity.