

**S4 Table.** Results of the Spearman correlation analysis between values of FDG PET/CT and FMISO PET/CT

Metabolic parameter by FDG PET/CT	Hypoxic parameter by FMISO PET/CT			
	mSUV	HV	HLU	T/B
Pre-treatment				
mSUV	0.18 (p=0.515)	0.37 (p=0.178)	0.36 (p=0.182)	0.36 (p=0.182)
MTV	0.29 (p=0.289)	0.69 (p=0.006)	0.66 (p=0.009)	0.66 (p=0.009)
TLG	0.36 (p=0.187)	0.79 (p<0.001)	0.77 (p=0.001)	0.77 (p=0.001)
Post-treatment				
mSUV	0.53 (p=0.047)	0.17 (p=0.548)	0.20 (p=0.482)	0.20 (p=0.490)
MTV	0.50 (p=0.060)	0.83 (p<0.001)	0.81 (p<0.001)	0.84 (p<0.001)
TLG	0.69 (p=0.006)	0.90 (p<0.001)	0.89 (p<0.001)	0.91 (p<0.001)

Significant probabilities ( $p < 0.05$ ). FDG,  $^{18}\text{F}$ -Fludeoxyglucose; FMISO,  $^{18}\text{F}$ -fluoromisonidazole; HLU, hypoxic lesion uptake; HV, hypoxic volume; mSUV, maximum standardized uptake value; MTV, metabolic tumor volume; PET/CT, positron emission tomography/computed tomography; T/B, tumor to background ratio; TLG, total lesion glycolysis.