

Supplementary Materials

Image Analysis Reveals Microstructural and Volumetric Differences in Glioblastoma Patients with and without Preoperative Seizures

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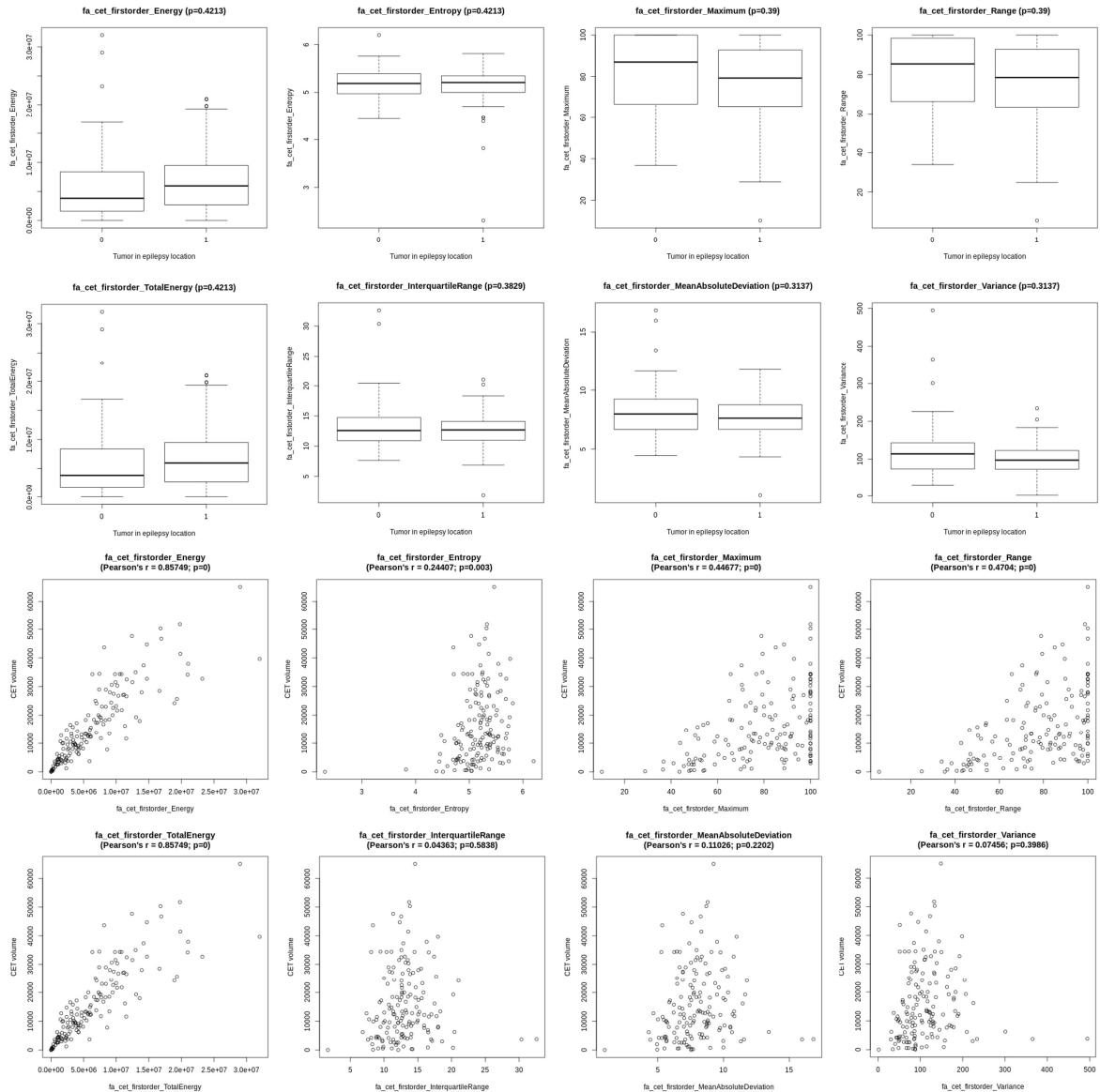


Figure S1. Box plots for FA first order features in tumors in epilepsy location / different location. Scatter plots for FA first order features and tumor volume of the contrast-enhancing tumor (CET).

Table S1. First order features.

Feature perm.	p-Value
fa_cet_firstorder_10Percentile	1
fa_cet_firstorder_90Percentile	0.192807193
fa_cet_firstorder_Energy	0.016983017*
fa_cet_firstorder_Entropy	0.042957043*
fa_cet_firstorder_InterquartileRange	0.012987013*
fa_cet_firstorder_Kurtosis	1
fa_cet_firstorder_Maximum	0.042957043*
fa_cet_firstorder_MeanAbsoluteDeviation	0.016983017*
fa_cet_firstorder_Mean	0.959040959
fa_cet_firstorder_Median	1
fa_cet_firstorder_Minimum	0.862137862
fa_cet_firstorder_Range	0.024975025*
fa_cet_firstorder_RobustMeanAbsoluteDeviation	0.051948052
fa_cet_firstorder_RootMeanSquared	0.71028971
fa_cet_firstorder_Skewness	0.68031968
fa_cet_firstorder_TotalEnergy	0.016983017*
fa_cet_firstorder_Uniformity	0.882117882
fa_cet_firstorder_Variance	0.038961039*
adc_cet_firstorder_10Percentile	1
adc_cet_firstorder_90Percentile	1
adc_cet_firstorder_Energy	0.999000999
adc_cet_firstorder_Entropy	1
adc_cet_firstorder_InterquartileRange	1
adc_cet_firstorder_Kurtosis	0.992007992
adc_cet_firstorder_Maximum	0.996003996
adc_cet_firstorder_MeanAbsoluteDeviation	1
adc_cet_firstorder_Mean	1
adc_cet_firstorder_Median	1
adc_cet_firstorder_Minimum	1
adc_cet_firstorder_Range	1
adc_cet_firstorder_RobustMeanAbsoluteDeviation	0.974025974
adc_cet_firstorder_RootMeanSquared	1
adc_cet_firstorder_Skewness	1
adc_cet_firstorder_TotalEnergy	0.999000999
adc_cet_firstorder_Uniformity	1
adc_cet_firstorder_Variance	1
fa_flair_firstorder_10Percentile	1
fa_flair_firstorder_90Percentile	1
fa_flair_firstorder_Energy	0.984015984
fa_flair_firstorder_Entropy	1
fa_flair_firstorder_InterquartileRange	1
fa_flair_firstorder_Kurtosis	1
fa_flair_firstorder_Maximum	1
fa_flair_firstorder_MeanAbsoluteDeviation	1
fa_flair_firstorder_Mean	1
fa_flair_firstorder_Median	1
fa_flair_firstorder_Minimum	0.703296703
fa_flair_firstorder_Range	0.999000999
fa_flair_firstorder_RobustMeanAbsoluteDeviation	1
fa_flair_firstorder_RootMeanSquared	1
fa_flair_firstorder_Skewness	1
fa_flair_firstorder_TotalEnergy	0.984015984
fa_flair_firstorder_Uniformity	1
fa_flair_firstorder_Variance	1
adc_flair_firstorder_10Percentile	1

adc_flair_firstorder_90Percentile	1
adc_flair_firstorder_Energy	0.432567433
adc_flair_firstorder_Entropy	1
adc_flair_firstorder_InterquartileRange	1
adc_flair_firstorder_Kurtosis	1
adc_flair_firstorder_Maximum	1
adc_flair_firstorder_MeanAbsoluteDeviation	1
adc_flair_firstorder_Mean	1
adc_flair_firstorder_Median	1
adc_flair_firstorder_Minimum	0.999000999
adc_flair_firstorder_Range	1
adc_flair_firstorder_RobustMeanAbsoluteDeviation	1
adc_flair_firstorder_RootMeanSquared	1
adc_flair_firstorder_Skewness	1
adc_flair_firstorder_TotalEnergy	0.432567433
adc_flair_firstorder_Uniformity	0.995004995
adc_flair_firstorder_Variance	1
cet_volume	0.028971029*
flair_volume	0.725274725

FA: fractional anisotropy, ADC: apparent diffusion coefficient, CET: contrast enhancing tumor,
FLAIR: fluid-attenuated inversion recovery. * $p < 0.05$.



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