

Reproducibility study of tumor lesion features in [68Ga]Ga-PSMA PET/CT scans

Caption:

	Excellent reproducibility
	Good reproducibility
	Moderate reproducibility
	Poor reproducibility

Feature Class	Feature Name	Intraclass correlation coefficient	95% Confidence Interval	
			Inferior Limit	Superior Limit
shape	Elongation	0.598	0.509	0.674
shape	Flatness	0.523	0.424	0.609
shape	LeastAxisLength	0.830	0.785	0.866
shape	MajorAxisLength	0.897	0.869	0.919
shape	Maximum2DDiameterColumn	0.886	0.855	0.911
shape	Maximum2DDiameterRow	0.886	0.855	0.911
shape	Maximum2DDiameterSlice	0.855	0.817	0.886
shape	Maximum3DDiameter	0.893	0.864	0.916
shape	MeshVolume	0.888	0.858	0.912
shape	MinorAxisLength	0.888	0.857	0.912
shape	Sphericity	0.824	0.778	0.861
shape	SurfaceArea	0.891	0.862	0.915
shape	SurfaceVolumeRatio	0.730	0.663	0.785
shape	VoxelVolume	0.890	0.860	0.914
firstorder	10Percentile	0.666	0.588	0.731
firstorder	90Percentile	0.828	0.774	0.868
firstorder	Energy	0.455	0.348	0.550
firstorder	Entropy	0.910	0.861	0.939
firstorder	InterquartileRange	0.855	0.802	0.893
firstorder	Kurtosis	0.466	0.360	0.560
firstorder	Maximum	0.868	0.818	0.903
firstorder	MeanAbsoluteDeviation	0.853	0.798	0.892
firstorder	Mean	0.803	0.749	0.846
firstorder	Median	0.762	0.700	0.811
firstorder	Minimum	0.637	0.554	0.707
firstorder	Range	0.873	0.819	0.909
firstorder	RobustMeanAbsoluteDeviation	0.854	0.800	0.892
firstorder	RootMeanSquared	0.817	0.764	0.858
firstorder	Skewness	0.466	0.359	0.560
firstorder	Uniformity	0.784	0.721	0.833
firstorder	Variance	0.646	0.562	0.717
glcm	Autocorrelation	0.578	0.410	0.706
glcm	ClusterProminence	0.405	0.216	0.566
glcm	ClusterShade	0.582	0.417	0.708
glcm	ClusterTendency	0.635	0.478	0.750
glcm	Contrast	0.521	0.345	0.660
glcm	Correlation	0.800	0.710	0.865

glcm	DifferenceAverage	0.793	0.667	0.869
glcm	DifferenceEntropy	0.935	0.868	0.964
glcm	DifferenceVariance	0.555	0.385	0.687
glcm	Id	0.945	0.900	0.968
glcm	Idm	0.949	0.911	0.970
glcm	Idmn	0.516	0.343	0.655
glcm	Idn	0.631	0.485	0.742
glcm	Imc1	0.893	0.821	0.934
glcm	Imc2	0.928	0.889	0.954
glcm	InverseVariance	0.897	0.833	0.935
glcm	JointAverage	0.792	0.665	0.869
glcm	JointEnergy	0.790	0.695	0.858
glcm	JointEntropy	0.944	0.908	0.965
glcm	MCC	0.892	0.827	0.931
glcm	MaximumProbability	0.749	0.640	0.829
glcm	SumAverage	0.792	0.665	0.869
glcm	SumEntropy	0.942	0.900	0.965
glcm	SumSquares	0.604	0.441	0.726
gldm	DependenceEntropy	0.849	0.778	0.899
gldm	DependenceNonUniformity	0.807	0.720	0.870
gldm	DependenceNonUniformityNormalized	0.834	0.745	0.892
gldm	DependenceVariance	0.672	0.539	0.773
gldm	GrayLevelNonUniformity	0.726	0.609	0.812
gldm	GrayLevelVariance	0.613	0.451	0.734
gldm	HighGrayLevelEmphasis	0.584	0.416	0.711
gldm	LargeDependenceEmphasis	0.804	0.716	0.867
gldm	LargeDependenceHighGrayLevelEmphasis	0.596	0.440	0.717
gldm	LargeDependenceLowGrayLevelEmphasis	0.732	0.616	0.816
gldm	LowGrayLevelEmphasis	0.578	0.420	0.702
gldm	SmallDependenceEmphasis	0.892	0.798	0.937
gldm	SmallDependenceHighGrayLevelEmphasis	0.549	0.377	0.683
gldm	SmallDependenceLowGrayLevelEmphasis	0.307	0.104	0.485
glrlm	GrayLevelNonUniformity	0.810	0.724	0.872
glrlm	GrayLevelNonUniformityNormalized	0.917	0.875	0.946
glrlm	GrayLevelVariance	0.616	0.455	0.736
glrlm	HighGrayLevelRunEmphasis	0.588	0.421	0.714
glrlm	LongRunEmphasis	0.783	0.687	0.853
glrlm	LongRunHighGrayLevelEmphasis	0.590	0.423	0.716
glrlm	LongRunLowGrayLevelEmphasis	0.712	0.590	0.802
glrlm	LowGrayLevelRunEmphasis	0.628	0.482	0.739
glrlm	RunEntropy	0.920	0.862	0.952

glrlm	RunLengthNonUniformity	0.895	0.844	0.930
glrlm	RunLengthNonUniformityNormalized	0.908	0.857	0.941
glrlm	RunPercentage	0.884	0.826	0.924
glrlm	RunVariance	0.756	0.649	0.833
glrlm	ShortRunEmphasis	0.884	0.826	0.923
glrlm	ShortRunHighGrayLevelEmphasis	0.586	0.419	0.713
glrlm	ShortRunLowGrayLevelEmphasis	0.571	0.411	0.696
glszm	GrayLevelNonUniformity	0.563	0.401	0.691
glszm	GrayLevelNonUniformityNormalized	0.762	0.657	0.838
glszm	GrayLevelVariance	0.654	0.498	0.765
glszm	HighGrayLevelZoneEmphasis	0.641	0.486	0.755
glszm	LargeAreaEmphasis	0.491	0.313	0.636
glszm	LargeAreaHighGrayLevelEmphasis	0.442	0.255	0.597
glszm	LargeAreaLowGrayLevelEmphasis	0.455	0.270	0.607
glszm	LowGrayLevelZoneEmphasis	0.619	0.470	0.733
glszm	SizeZoneNonUniformity	0.656	0.511	0.763
glszm	SizeZoneNonUniformityNormalized	0.708	0.555	0.809
glszm	SmallAreaEmphasis	0.616	0.465	0.732
glszm	SmallAreaHighGrayLevelEmphasis	0.631	0.474	0.747
glszm	SmallAreaLowGrayLevelEmphasis	0.189	-0.023	0.385
glszm	ZoneEntropy	0.910	0.866	0.941
glszm	ZonePercentage	0.895	0.811	0.938
glszm	ZoneVariance	0.494	0.316	0.638
ngtdm	Busyness	0.440	0.253	0.595
ngtdm	Coarseness	0.689	0.560	0.785
ngtdm	Complexity	0.498	0.320	0.642
ngtdm	Contrast	0.502	0.324	0.645
ngtdm	Strength	0.772	0.654	0.850