

Supplementary Files

Pre-Treatment T2-WI Based Radiomics Features for Prediction of Locally Advanced Rectal Cancer Non-Response to Neoadjuvant Chemoradiotherapy: A Preliminary Study

Bianca Petresc, Andrei Lebovici, Cosmin Caraiani, Diana Sorina Feier, Florin Graur and Mircea Marian Buruian

PyRadiomics Configuration

setting:

```
# Image discretization:
# The gray values were discretized using a fixed-bin width of 5
binWidth: 5

# Normalization:
# Images were normalized before feature extraction to 0 mean and 100 standard deviation
normalize: true
normalizeScale: 100

# Resampling:
# Images were interpolated to isotropic voxels with 2 mm sides using a B-Spline interpolator
interpolator: 'sitkBSpline'
resampledPixelSpacing: [2, 2, 2]

# Resegmentation
# Segmentations were resegmented by excluding voxels which differed > 3 sigma from the
mean
resegmentRange: [-3,3]
resegmentMode: sigma

# first order specific settings:
# When normalizing, gray values below the mean will be negative. Shifting by 300 (3 StdDevs
* 100) ensures that the majority of voxels is positive (only outliers >3 SD lower than the mean will be
negative).
voxelArrayShift: 300

# Misc:
# default label value.
label: 1
```

imageType:

```
# Selection of filters
Original: {}
```

LoG:

sigma: [3.0, 5.0]

Wavelet: {}

featureClass:

Selection of the extracted radiomics features

shape:

firstorder:

glcm:

- 'Autocorrelation'
- 'JointAverage'
- 'ClusterProminence'
- 'ClusterShade'
- 'ClusterTendency'
- 'Contrast'
- 'Correlation'
- 'DifferenceAverage'
- 'DifferenceEntropy'
- 'DifferenceVariance'
- 'JointEnergy'
- 'JointEntropy'
- 'Imc1'
- 'Imc2'
- 'Idm'
- 'Idmn'
- 'Id'
- 'Idn'
- 'InverseVariance'
- 'MaximumProbability'
- 'SumEntropy'
- 'SumSquares'

glrlm:

glszm:

gldm:



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).