

## Appendix 1

a\_ED\_original\_firstorder\_10Percentile: 10th percentile of electron cloud density map at the arterial phase  
 a\_ED\_original\_firstorder\_90Percentile: 90th percentile of electron cloud density map at the arterial phase  
 a\_ED\_original\_firstorder\_Entropy: Entropy of electron cloud density map at the arterial phase  
 a\_ED\_original\_firstorder\_Kurtosis: Kurtosis of electron cloud density map at the arterial phase  
 a\_ED\_original\_firstorder\_Mean: Mean of electron cloud density map at the arterial phase  
 a\_ED\_original\_firstorder\_Skewness: Skewness of electron cloud density map at the arterial phase  
 a\_ED\_original\_firstorder\_Uniformity: Uniformity of electron cloud density map at the arterial phase  
 a\_ID\_original\_firstorder\_10Percentile: 10th percentile of iodine density map at the arterial phase  
 a\_ID\_original\_firstorder\_90Percentile: 90th percentile of iodine density map at the arterial phase  
 a\_ID\_original\_firstorder\_Entropy: Entropy of iodine density map at the arterial phase  
 a\_ID\_original\_firstorder\_Kurtosis: Kurtosis of iodine density map at the arterial phase  
 a\_ID\_original\_firstorder\_Mean: Mean of iodine density map at the arterial phase  
 a\_NIC: Mean of standardized iodine density map at the arterial phase  
 a\_ID\_original\_firstorder\_Skewness: Skewness of iodine density map at the arterial phase  
 a\_ID\_original\_firstorder\_Uniformity: Uniformity of iodine density map at the arterial phase  
 a\_VNC\_original\_firstorder\_10Percentile: 10th percentile of virtual non-contrast map at the arterial phase  
 a\_VNC\_original\_firstorder\_90Percentile: 90th percentile of virtual non-contrast map at the arterial phase  
 a\_VNC\_original\_firstorder\_Entropy: Entropy of virtual non-contrast map at the arterial phase  
 a\_VNC\_original\_firstorder\_Kurtosis: Kurtosis of virtual non-contrast map at the arterial phase  
 a\_VNC\_original\_firstorder\_Mean: Mean of virtual non-contrast map at the arterial phase  
 a\_VNC\_original\_firstorder\_Skewness: Skewness of virtual non-contrast map at the arterial phase  
 a\_VNC\_original\_firstorder\_Uniformity: Uniformity of virtual non-contrast map at the arterial phase  
 a\_Zeff\_original\_firstorder\_10Percentile: 10th percentile of effective atomic number map at the arterial phase  
 a\_Zeff\_original\_firstorder\_90Percentile: 90th percentile of effective atomic number map at the arterial phase  
 a\_Zeff\_original\_firstorder\_Entropy: Entropy of effective atomic number map at the arterial phase  
 a\_Zeff\_original\_firstorder\_Kurtosis: Kurtosis of effective atomic number map at the arterial phase  
 a\_Zeff\_original\_firstorder\_Mean: Mean of effective atomic number map at the arterial phase  
 a\_Zeff\_original\_firstorder\_Skewness: Skewness of effective atomic number map at the arterial phase  
 a\_Zeff\_original\_firstorder\_Uniformity: Uniformity of effective atomic number map at the arterial phase  
 p\_original\_shape\_Flatness: Flatness at plain phase  
 p\_original\_shape\_Maximum2DDiameterSlice: Maximum2DDiameterSlice at plain phase  
 p\_original\_shape\_Sphericity: Sphericity at plain phase  
 p\_original\_shape\_VoxelVolume: VoxelVolume at plain phase  
 p\_original\_firstorder\_Mean: Mean at the plain phase  
 v\_ED\_original\_firstorder\_10Percentile: 10th percentile of electron cloud density map at the venous phase  
 v\_ED\_original\_firstorder\_90Percentile: 90th percentile of electron cloud density map at the venous phase  
 v\_ED\_original\_firstorder\_Entropy: Entropy of electron cloud density map at the venous phase  
 v\_ED\_original\_firstorder\_Kurtosis: Kurtosis of electron cloud density map at the venous phase  
 v\_ED\_original\_firstorder\_Mean: Mean of electron cloud density map at the venous phase  
 v\_ED\_original\_firstorder\_Skewness: Skewness of electron cloud density map at the venous phase  
 v\_ED\_original\_firstorder\_Uniformity: Uniformity of electron cloud density map at the venous phase  
 v\_ID\_original\_firstorder\_10Percentile: 10th percentile of iodine density map at the venous phase  
 v\_ID\_original\_firstorder\_90Percentile: 90th percentile of iodine density map at the venous phase  
 v\_ID\_original\_firstorder\_Entropy: Entropy of iodine density map at the venous phase  
 v\_ID\_original\_firstorder\_Kurtosis: Kurtosis of iodine density map at the venous phase  
 v\_ID\_original\_firstorder\_Mean: Mean of iodine density map at the venous phase

v\_NIC: Mean of standardized iodine density map at the venous phase  
v\_ID\_original\_firstorder\_Skewness: Kurtosis of iodine density map at the venous phase  
v\_ID\_original\_firstorder\_Uniformity: Mean of iodine density map at the venous phase  
v\_VNC\_original\_firstorder\_10Percentile: 10th percentile of virtual non-contrast map at the venous phase  
v\_VNC\_original\_firstorder\_90Percentile: 90th percentile of virtual non-contrast map at the venous phase  
v\_VNC\_original\_firstorder\_Entropy: Entropy of virtual non-contrast map at the venous phase  
v\_VNC\_original\_firstorder\_Kurtosis: Kurtosis of virtual non-contrast map at the venous phase  
v\_VNC\_original\_firstorder\_Mean: Mean of virtual non-contrast map at the venous phase  
v\_VNC\_original\_firstorder\_Skewness: Skewness of virtual non-contrast map at the venous phase  
v\_VNC\_original\_firstorder\_Uniformity: Uniformity of virtual non-contrast map at the venous phase  
v\_Zeff\_original\_firstorder\_10Percentile: 10th percentile of effective atomic number map at the venous phase  
v\_Zeff\_original\_firstorder\_90Percentile: 90th percentile of effective atomic number map at the venous phase  
v\_Zeff\_original\_firstorder\_Entropy: Entropy of effective atomic number map at the venous phase  
v\_Zeff\_original\_firstorder\_Kurtosis: Kurtosis of effective atomic number map at the venous phase  
v\_Zeff\_original\_firstorder\_Mean: Mean of effective atomic number map at the venous phase  
v\_Zeff\_original\_firstorder\_Skewness: Skewness of effective atomic number map at the venous phase  
v\_Zeff\_original\_firstorder\_Uniformity: Uniformity of effective atomic number map at the venous phase