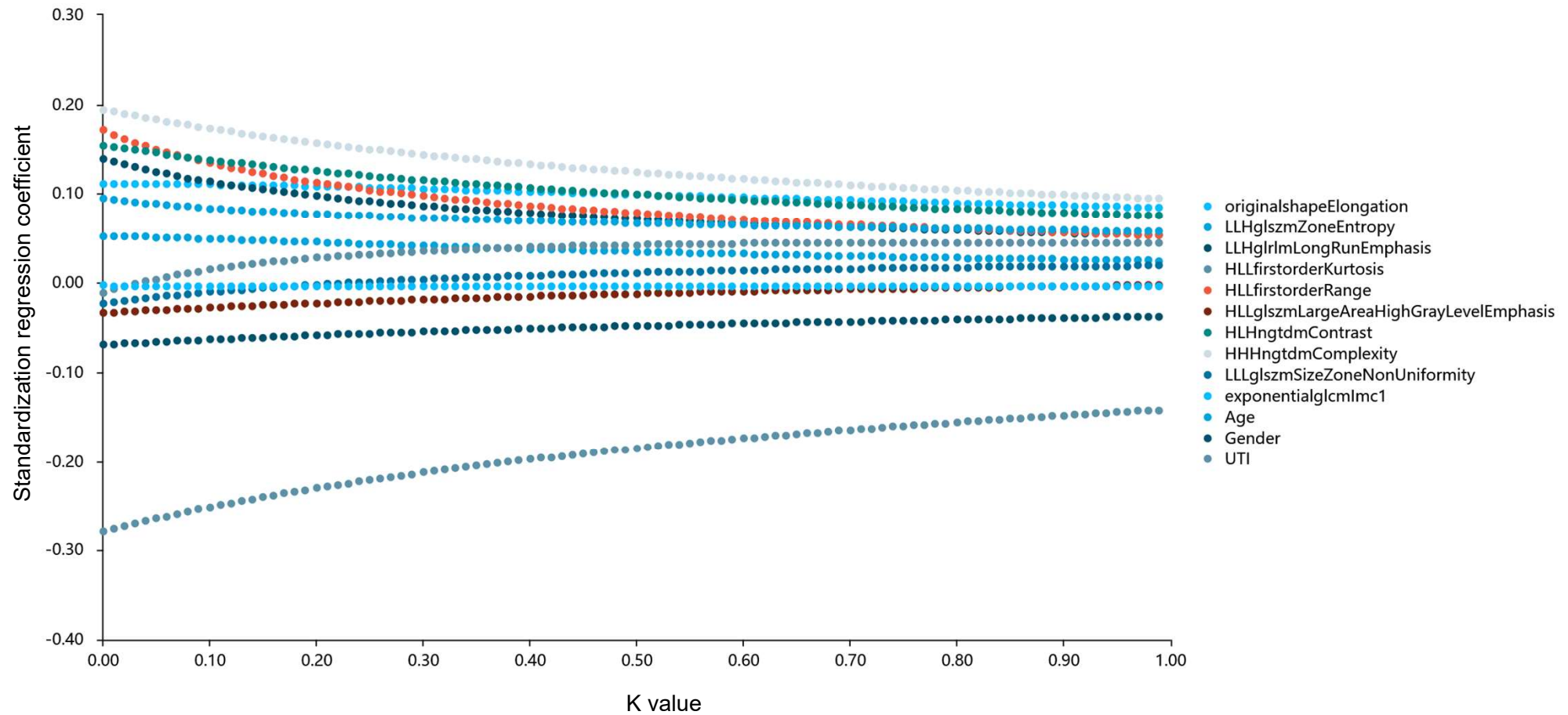


**Supplementary Table 1. List of radiomics feature classes with descriptions from the PyRadiomics package**

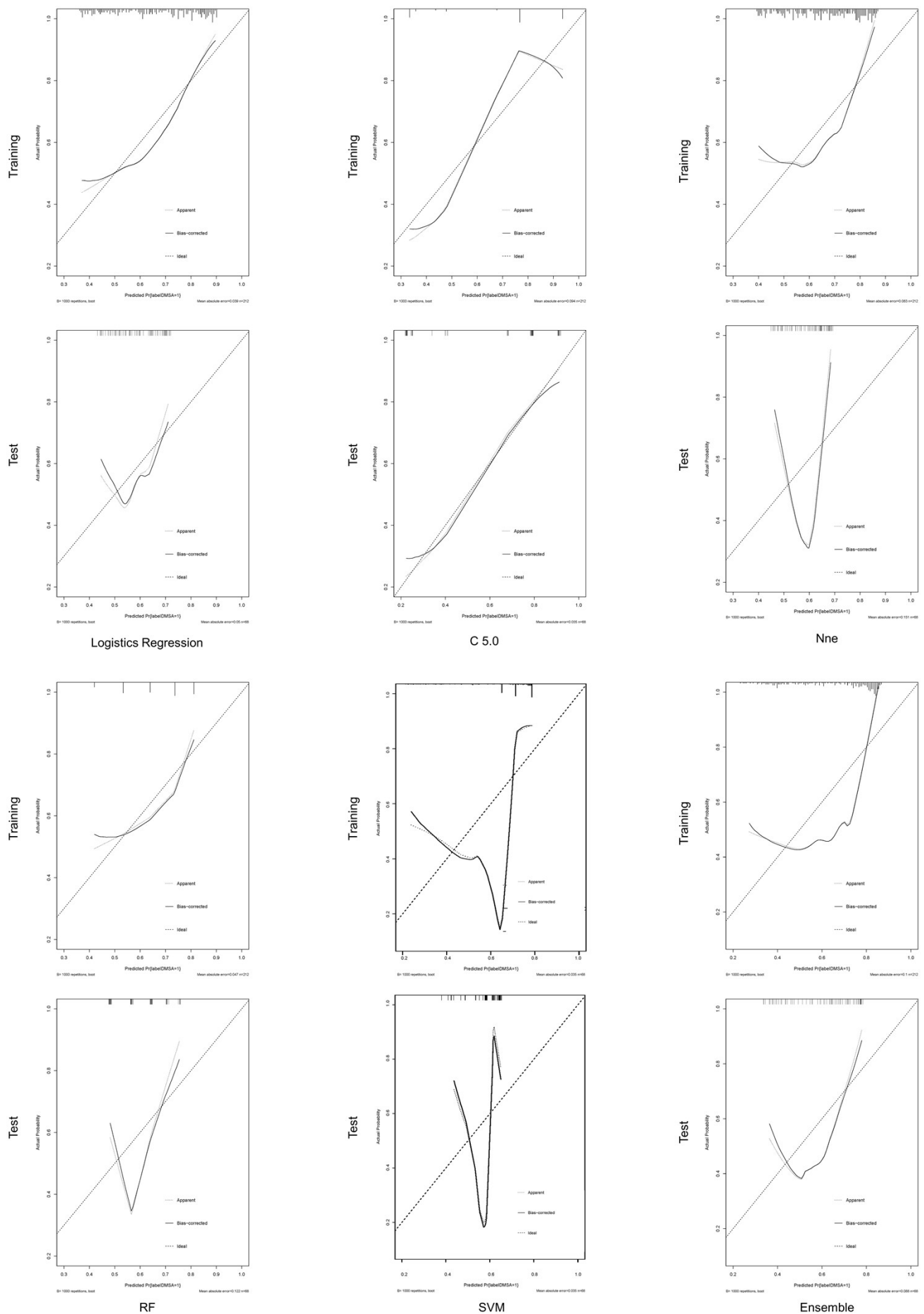
Radiomics feature	Description
First-order statistics	Distribution of voxel intensities within the ROI
Shape-based (2D)	Descriptors of the 2D size and shape of the ROI
Gray-level co-occurrence matrix, GLCM	Second-order joint probability function of the ROI
Gray-level run length matrix, GLRLM	Quantification of the length in the number of consecutive pixels that have the same gray-level value in the ROI
Gray-level size zone matrix, GLSZM	Quantification of gray-level zones (the number of connected pixels that share the same gray-level intensity) in the ROI
Neighboring gray tone difference matrix, NGTDM	Quantification of the difference between a gray value and the average gray value of its neighbors within the distance
Gray-level dependence matrix, GLDM	Quantification of gray-level dependencies (the number of connected pixels within distance $\delta$ that are dependent on the center pixel) in the ROI
Wavelet-based features	Wavelet filtering
Exponential-based features	The index of the image intensity value
Logarithm-based features	The logarithm of the absolute intensity of the image +1

**Supplementary Table 2. Univariate analysis results of image features**

Features	Normal	Abnormal	P value
original_shape_Elongation	-0.27±0.78	0.25±1.11	0.000
wavelet-LLH_glszm_ZoneEntropy	-0.13±1.04	0.12±0.95	0.039
wavelet-LLH_glrIm_LongRunEmphasis	-0.14±0.90	0.13±1.08	0.025
wavelet-HLL_firstorder_Kurtosis	-0.19±0.70	0.17±1.19	0.003
wavelet-HLL_firstorder_Range	-0.13±0.94	0.12±1.04	0.032
wavelet-HLL_glszm_LargeAreaHighGrayLevelEmphasis	-0.13±0.91	0.12±1.04	0.035
wavelet-HLH_ngtdm_Contrast	-0.13±0.91	0.12±1.06	0.035
wavelet-HHH_ngtdm_Complexity	-0.15±1.01	0.13±0.98	0.020
wavelet-LLL_glszm_SizeZoneNonUniformity	-0.17±0.89	0.15±1.08	0.007
exponential_glcM_lmc1	-0.14±1.07	0.12±0.92	0.032



Supplementary Figure 1. Analysis of multicollinearity by assessing the variance inflation factor (VIF) among the selected features.



Supplementary Figure 2. Reliability curve of all models across training and test cohorts. The clinical–radiomics models: logistic regression (LR), decision tree (C5.0), Vector Machines (SVM), neural network (Nnet), Random Forest (RF) and Ensemble model.