

Table S1. Radiomic features calculated from ^{18}F -FDG PET/CT images in Lifex.

	Features
Gray-level co-occurrence matrix (GLCM)	Homogeneity
	EnergyGLCM
	ContrastGLCM
	CorrelationGLCM
	EntropyGLCM
	Dissimilarity
Neighborhood gray-level different matrix (NGLDM)	Contrast _{NGTDM}
	Coarseness
Gray-level run-length matrix (GLRLM)	Short-Run Emphasis
	Long-Run Emphasis
	Low Gray-level Run Emphasis
	High Gray-level Run Emphasis
	Short-Run Low Gray-level Emphasis
	Short-Run High Gray-level Emphasis
	Long-Run Low Gray-level Emphasis
	Long-Run High Gray-level Emphasis
	Gray-Level Non-Uniformity for run
	Run Length Non-Uniformity
Gray-level zone-length matrix (GLZLM)	Run Percentage
	Short-Zone Emphasis
	Long-Zone Emphasis
	Low Gray-level Zone Emphasis
	High Gray-level Zone Emphasis
	Short-Zone Low Gray-level Emphasis
	Short-Zone High Gray-level Emphasis
	Long-Zone Low Gray-level Emphasis
	Long-Zone High Gray-level Emphasis
	Gray-Level Non-Uniformity for zone
Shape and Size	Zone Length Non-Uniformity Zone
	Percentage
Histogram	Sphericity
	Compacity
	Skewness
	Kurtosis
	Entropy _{Hist}
	Energy _{Hist}
Conventional parameters	SUV minimum
	SUV maximum
	SUVmean
	SUVstandard deviation
	SUVpeak within a sphere of 0.5 and 1 mL volume (mL)
	Metabolic tumor volume (MTV)
	Total lesion glycolysis (TLG)

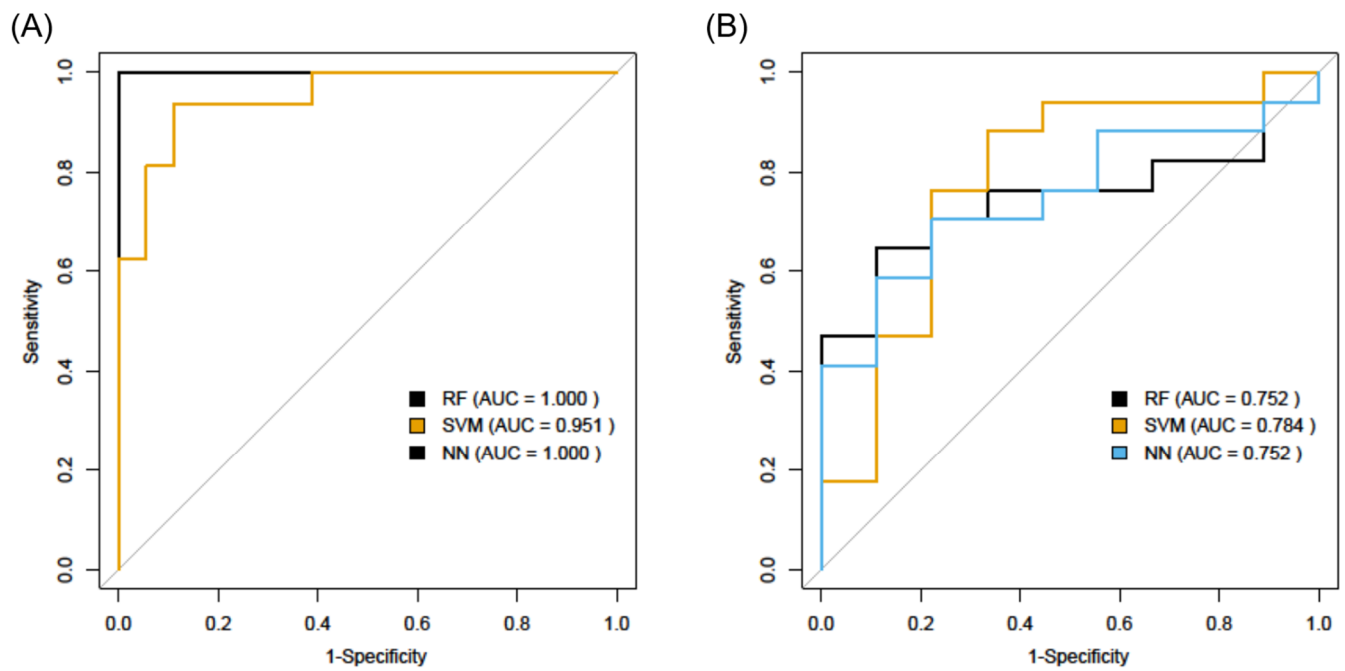


Figure S1. shows the ROC curves of the prediction models by three machine learning algorithms in the training and test datasets. The area under the curve (AUC) values of the prediction models constructed by the RF, SVM, and NN were 0.752, 0.784, 0.752 (B), respectively in the test dataset (A).